



Environment

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Granville Solvents Superfund Site 2015 Annual Groundwater Monitoring Report

Granville Solvents Site
Granville, Licking County, Ohio

USEPA ID: OHD004495412

February 18, 2016

Contents

1.0 Introduction	1
2.0 Background	1
2.1 Response Actions	1
2.2 Removal Action Completion (RAC) Report	2
2.3 Site Hydrogeology.....	3
3.0 Contingency Plan	4
4.0 Methods	5
4.1 Maintenance and Repairs.....	5
4.2 Groundwater Sampling	5
5.0 Results	5
5.1 Potentiometric Surface	5
5.2 Groundwater Sampling	6
5.2.1 Source Area Wells	6
5.2.2 Intermediate Well	7
5.2.3 Leading Edge Wells	7
5.2.4 Compliance Wells	7
6.0 Conclusions	7
7.0 References	8

List of Figures

Figure 1 Site Location Map

Figure 2 Potentiometric Surface Map – December 2015

List of Tables

Table 1 Water Level Measurements

Table 2 Monitoring Well Purging Data

Table 3 Summary of Groundwater Analytical Results

List of Appendices

Appendix A Sampling Procedure Change Notification - May 8, 2012

Appendix B Concentration Trend Graphs

Appendix C Iso-Concentration Maps- PCE, TCE, TCA (December 2015)

Appendix D Groundwater Analytical Reports

1.0 Introduction

AECOM has prepared this annual groundwater monitoring report for sampling conducted during Calendar Year 2015 at the Granville Solvents Site (Site) in Granville, Licking County, Ohio (Figure 1). The report was prepared on behalf of the Granville Solvents Site Removal Management Group, LLC (the Group) to fulfill monitoring requirements for the Administrative Order on Consent (AOC) issued by the United States Environmental Protection Agency (USEPA) on September 7, 1994 for the Granville Solvents Site. Section V(2)(f) of the AOC requires groundwater performance monitoring until a Notice of Completion is issued for the AOC. Performance monitoring was originally defined in the *Proposal to Suspend Groundwater and Soil Treatment System Operation and Commence Post-Shutdown Groundwater Monitoring at the Granville Solvents Site*, (M&E 2004) and was subsequently modified by the Post-Shutdown Contingency Plan (Contingency Plan) dated January 31, 2005.

The Contingency Plan includes a groundwater monitoring program focused on monitoring the potential migration of specific volatile organic compounds (VOCs) that might occur once the treatment of groundwater and soils was suspended in March 2005. This monitoring program consisted of semi-annual sampling of eight (8) designated wells over a five year period (2005 to 2010). Collected samples have been analyzed for VOCs following the procedures outlined in the *Groundwater Monitoring Program Plan for the Granville Solvents Site in Granville, Ohio* (M&E 1995) (Groundwater Monitoring Plan).

After the 2005 to 2010 monitoring period outlined in the Contingency Plan was completed, a Draft Removal Action Completion (RAC) Report dated July 30, 2010 was submitted to the USEPA in order to apply for a Notice of Completion (NOC) regarding removal actions and post-shutdown monitoring. USEPA review of comments dated April 6, 2011 requested continued annual (groundwater) monitoring for a minimum of two years (annually through 2013). Semi-annual groundwater monitoring events were conducted from 2011 to 2013.

This report contains the results of potentiometric surfaces measurements and groundwater sampling conducted in December of 2015 and a comparison of groundwater quality relative to historic results and current trigger levels outlined in the Contingency Plan.

2.0 Background

2.1 Response Actions

The AOC required completion of certain removal actions at the Site. Those removal actions were defined by the following orders in Section V(2)(e-g) of the AOC:

1. By December 20, 1994, install and run a groundwater extraction and treatment system which shall halt the migration of groundwater contamination (originating from the Site) toward the Village of Granville Municipal Well Field (Granville Well Field). Treat and discharge all extracted water.
2. Implement action which is necessary to ensure that any water contaminated with any contamination (originating from the Site) that enters the Granville Well Field drinking water

supply meets all risk-based and all applicable federal and state drinking water standards. Such action may include utilization of, modification to, and/or addition to the Granville Well-field drinking water supply system.

3. Design, install, and operate a groundwater extraction and treatment system which shall halt the migration of groundwater contamination (originating from the Site) toward the Granville Well Field and shall treat all groundwater within the contamination plume originating from the Site to no further action levels which assure protection of human health and the environment and attain all risk-based standards and federal and state ARARs.
4. Treat the soils at the Site to levels which will assure protection of human health and the environment to levels which will attain all risk-based standards and federal and state ARARs, and to levels which will assure, to the maximum extent practicable, that no groundwater beneath the soils will become contaminated above the groundwater no further action levels. Soil "no further action" levels were defined in the Engineering Evaluation /Cost Analysis Report (EE/CA)(M&E 1999).

The Group has completed the following Removal Actions at the Site:

1. Installation and operation of a groundwater extraction and treatment system that operated on a continuous basis from December 1994 through March 2005. The system halted migration of contaminated groundwater from the Site and reduced the mass and size of the plume to meet the obligations established in the AOC.
2. Supply well PW-4 was installed in the Granville Well-field to replace [capacity of] PW-1.
3. VOCs in groundwater at the Granville Well Field and at monitoring wells between the source area and the Granville Well Field have been reduced to levels at or below no further action levels.
4. A soil treatment system was installed and operated between 2001 and 2005.

The Group submitted a proposal and Contingency Plan to USEPA and Ohio EPA to suspend groundwater and soil treatment and monitor groundwater quality for a 5-year period from March 2005 to 2010. Groundwater quality data was collected during this period and culminated in the development and submittal of a Draft Removal Action Completion (RAC) Report dated July 30, 2010 as described in the following section of this report.

2.2 Removal Action Completion (RAC) Report

The RAC Report was submitted to the EPA in order to apply for a Notice of Completion (NOC) regarding removal actions conducted at the site between 1995 and 2005 as required by the 1994 AOC. The USEPA provided review comments dated April 6, 2011 requesting performance of the following tasks as outlined in Section 6 of the comment letter:

1. Perform vertical aquifer sampling from the top to the bottom of the aquifer at a location halfway between the MW-07 and MW-08 clusters.
2. Collect groundwater levels on a 20-minute frequency in several monitoring wells to determine if trends in water levels can be attributed to the start or termination of pumping from the municipal wells, and which pumping wells it can be related to.

3. Collect a (groundwater) sample from GSSEW-1.
4. Continue annual (groundwater) monitoring for a minimum of two years (semi-annually through 2012), and until it is determined that monitoring is no longer necessary.

The Group submitted a Post-RAC Work Plan (PRACWP) dated February 29, 2012 that describes methods to implement the activities noted above which was approved by the USEPA on April 12, 2012. Groundwater samples could not be obtained to the target depth of 120 ft below grade as specified in the PRACWP; therefore, a Post-RAC Work Plan addendum dated March 13, 2013 was submitted to USEPA and implemented resulting in a Post RAC Report Addendum dated July 11, 2013. The USEPA provided comments dated June 30, 2015 regarding the 2012 RAC Report and Addendum resulting in a discussion of the agency comments in a meeting with the USEPA conducted on August 11, 2015. In general, the following scope of work was agreed to in the meeting as follows:

- Responding to the USEPA Comments dated June 30, 2015;
- Conducting a fourth quarter groundwater sampling event in 2015; and
- Performing plume stability analysis of groundwater data between 2005 and 2015.

Based on the USEPA comments and subsequent discussions, the agency indicated that the plume stability should be evaluated after the 2005 remediation shut-down to confirm consideration of site closure and that the Ricker Plume Stability method would be their recommended procedure for analysis of the data.

2.3 Site Hydrogeology

The Conceptual Site Model (CSM) developed in the EE/CA concluded that the hydrogeologic setting for Raccoon Creek valley is a highly productive buried-valley aquifer with Raccoon Creek flowing generally to the east ultimately discharging into the Licking River. Groundwater gradients are typically low (only a few tenths of a foot difference in elevation) across the Site with a groundwater divide typically observed between the Site and the Granville Well Field.

The Site is located on the northern margin of the buried valley at a point where the valley narrows. In the absence of any local pumping, the regional gradient would be from west to east, with contributing recharge from the bedrock into the valley. Monitoring well GSSMW-06 (decommissioned) encountered the bedrock at the bottom of the boring confirming bedrock information from the Ohio Department of Natural Resources (OND). Groundwater levels in this well were typically higher than the other Site wells within the buried valley, which confirms the CSM concept of recharge from the valley walls. The proximity of the Site to the northern margin of the valley and the geometry of the overall valley narrowing adjacent to the Site support a slight groundwater divide between the Site and Granville Well-field. This slight divide is further enhanced by local withdrawals from the Granville Well-field pumping wells west of the Site. Even with the groundwater extraction system suspended since 2005, the divide appears to generally be present.

Groundwater measurements recorded since 2005 show that the Site and surrounding area typically experiences seasonally high water levels during the early part of the year and seasonally low water levels during the fall. The rise in the water level during the spring coupled with groundwater usage of the area during the summer months typically causes the groundwater direction to temporarily change from south to north; however, the divide appears to remain between the Site and the Granville Well Field during the shift in flow direction.

3.0 Contingency Plan

Main components of the Contingency Plan consist of the groundwater monitoring plan and Trigger Level definition. The groundwater monitoring plan consists of semi-annual to biennial monitoring of specific wells of the monitoring well network as follows:

1. Source Area Wells: [REDACTED]
2. Intermediate Well: [REDACTED]
3. Leading Edge Wells: [REDACTED]
4. Compliance Wells: [REDACTED]

Trigger Levels were developed to activate response actions that may result from trend analysis of Leading-Edge Wells and Compliance Wells. Exceeding Trigger Level concentrations would require immediate action to restart components of the existing treatment systems as follows:

- Leading Edge Wells – If the concentration of any VOC in a sample collected from MW-07D or MW-08 is greater than twice the Safe Drinking Water Act (SDWA) maximum contaminant level (MCL), groundwater treatment will be reinstated to retard the migration of the plume toward the Granville Well-field drinking water wells and reduce contaminant levels.
- Compliance Well - If the concentration of any VOC meets or exceeds the MCL in a sample collected from monitoring well GSSMW-08 and GSSMW-09, groundwater treatment will resume in order to reduce the concentrations to levels below respective MCLs.

Sampling events completed to date under the 2005 Contingency Plan include:

- 2005 - August;
- 2006 - May and July;
- 2007 – May and September;
- 2008 – April and September;
- 2009 – March and September;
- 2011 – May and November;
- 2012 – May and November;
- 2013 – June and December; and
- 2015 – December

Groundwater level measurements were collected quarterly from 2006 to 2007 and semi-annually to biennially thereafter to document the change of the potentiometric surface following system shutdown.

4.0 Methods

4.1 Maintenance and Repairs

No maintenance and repair activities were conducted during calendar year 2015.

4.2 Groundwater Sampling

Methods used to conduct the annual groundwater monitoring event in December 2015 are outlined in the Groundwater Monitoring Plan except for modification of the groundwater purge and sampling technique as outlined in the Procedure Change Notification letter submitted to USEPA on May 8, 2012 (Appendix A). The monitoring wells were sampled in 2015 using low-flow techniques via an air operated bladder pump during each well sampling event. The bladder system consists of a 1.75-inch stainless steel QED™ bladder pump operated by a combined pump controller/12-volt air compressor (QED™ MP50). New disposable polyethylene bladders and tubing were used before each monitoring was sampled. The pump was also thoroughly cleaned using a Liquinox™/distilled water wash followed by distilled water rinse before each monitoring was sampled. .

The monitoring well network used to monitor the groundwater conditions at the Site consisted of the existing wells MW-P1, MW-02D, MW-04D, MW-06, MW-07, MW-07D, MW-08, GSSMW-08, GSSMW-09 and GSS-MW15. MW-07 was included in the 2015 sampling event at the request of the USEPA made in a conference call conducted with representatives of the Group on August 11, 2015. In addition, MW-04D was not sampled during the December 2015 event due to an obstruction in the well riser (possible tree root intrusion). All Site monitoring wells were used to gauge groundwater depth to assist in determining the potentiometric surface. The 2015 routine site activities are summarized below.

December 2015

- Recorded water level measurements of all site monitoring wells;
- Performed the site inspection; and
- Sampled select monitoring wells.

Inspection and gauging of the monitoring wells, purging, groundwater sampling and management of purge water was performed over a three-day period. Groundwater samples were submitted to TestAmerica Laboratories, Inc. in Savannah, Georgia for analysis of VOCs by USEPA SW-846 Method 524.2 in accordance with the Groundwater Monitoring Plan.

5.0 Results

5.1 Potentiometric Surface

In conjunction with the annual sampling event, groundwater level measurements were collected on December 1, 2015. Water level measurements are provided on Table 1 of this report and indicate that the average water level decreased approximately 1.4 feet from December 2013 to December

2015. Historically, seasonal changes in over-all water levels are consistent with historic measurements since post shut-down monitoring (2005) and as noted in previous annual reports. The seasonal decreases or increases in water levels are likely due to seasonal variations in precipitation, groundwater usage and changes in Raccoon Creek water levels.

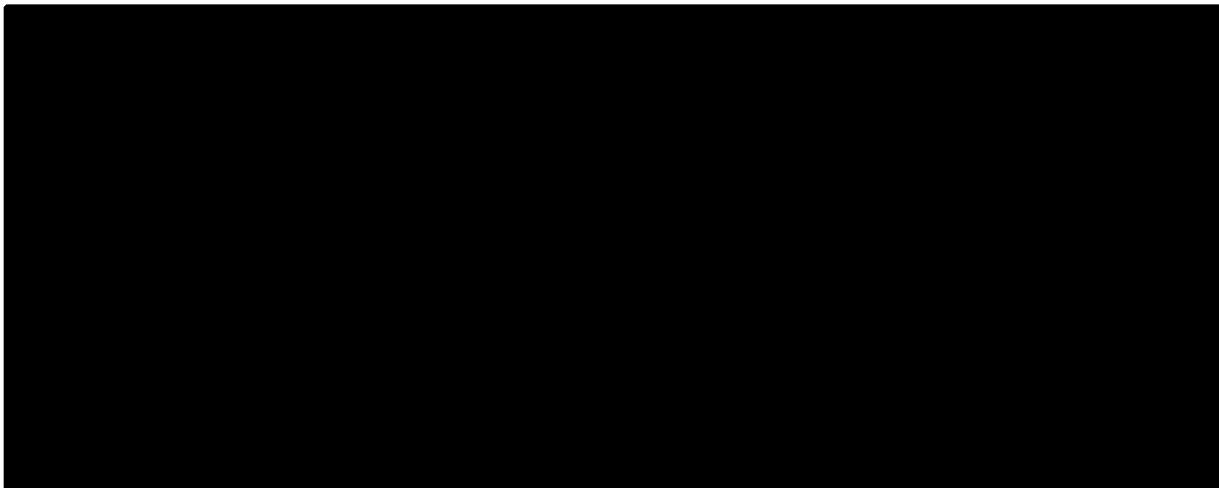
Figure 2 of this report provides a depiction of the potentiometric surface for the December 2015 sampling event. Based on information provided by the Village of Granville Water Department, water supply production well PW-4 was in use during the December 2015 gauging event. The December 2015 map indicates groundwater flow is emanating from Raccoon Creek with a very low average horizontal gradient of 0.007 ft/ft toward the Site and a high gradient toward and in the vicinity of PW-4 of 0.023 ft/ft due to supply well pumping. There appears to be a slight a groundwater divide between the Site and the Granville Well Field just east of the intersection of Palmer Lane and the bike path. The divide is more prominent when groundwater occasionally reverses toward Raccoon Creek. Groundwater flowing away from Raccoon Creek has typically been observed in the fall and winter seasons since the 2005 post shut-down monitoring period and occasionally in the summer season.

5.2 Groundwater Sampling

Purging data obtained for each monitoring well sampled is provided on Table 2. A summary of the groundwater analytical results for each monitoring well sampled is provided on Table 3 with historic data and concentration trend graphs for selected monitoring wells provided in Appendix B. Appendix C provides iso-concentration contour lines for PCE, TCE and TCA for the 2015 sampling event. The full analytical reports for groundwater testing with quality assurance/quality control documentation are provided in Appendix D.

The following sections present a general description of results for monitoring wells defined as Source Area Wells, Intermediate Wells, Leading Edge Wells and Compliance Wells per the Contingency Plan. It should be noted that only Leading Edge Wells and Compliance Wells have Contingency Plan Trigger Levels that, if exceeded, would trigger potential response actions. No Tigger Level exceedances were encountered for VOCs in either the Leading Edge Wells or Compliance Wells based on the December 2015 groundwater sampling event.

5.2.1 Source Area Wells



5.2.2 Intermediate Well

GSSMW-15 was installed in September 2005 between the Source Area Wells and the Leading Edge Wells. Both PCE and TCE are above the MCL of 5 µg/L with levels for both PCE and TCE slightly decreasing since 2013 to 11 and 55 µg/L, respectively.

5.2.3 Leading Edge Wells

5.2.4 Compliance Wells

6.0 Conclusions

Concentrations of detected VOCs observed in both Compliance Wells and Leading Edge Wells have remained below the Contingency Plan Trigger Levels for the December 2015 sampling event. VOC concentrations within the VOC source area were stable between the 2013 and 2015 sampling events with the exception of MW-02D (Source Area Well), which exhibited increases in concentrations of PCE, TCE and TCA. The 2015 sampling results support the following conclusions obtained from the Post-RAC Report (AECOM, 2012) and Post-RAC Report Addendum (AECOM, 2013):

- The VOC plume is not increasing in size and is stable;
- Natural attenuation is occurring at the edges of the VOC plume; and
- Under limited conditions, groundwater does appear to occasionally flow from the project site toward the Granville Well Field without influencing movement of the VOC plume.

The groundwater flow divide typically observed between the Site and the Granville Well Field was observed during the December 2015 sampling event with flow direction away from Raccoon Creek observed during the event.

A response to the USEPA Comments dated June 30, 2015 and performance of plume stability analysis of groundwater data between 2005 and 2015 are currently in progress.

7.0 References

Metcalf & Eddy, 1995. Groundwater Monitoring Program Plan for the Granville Solvents Site in Granville, Ohio, Revised July 25, 1995.

Metcalf & Eddy, 1999. Engineering Evaluation / Cost Analysis Report (EE/CA), August 1999.

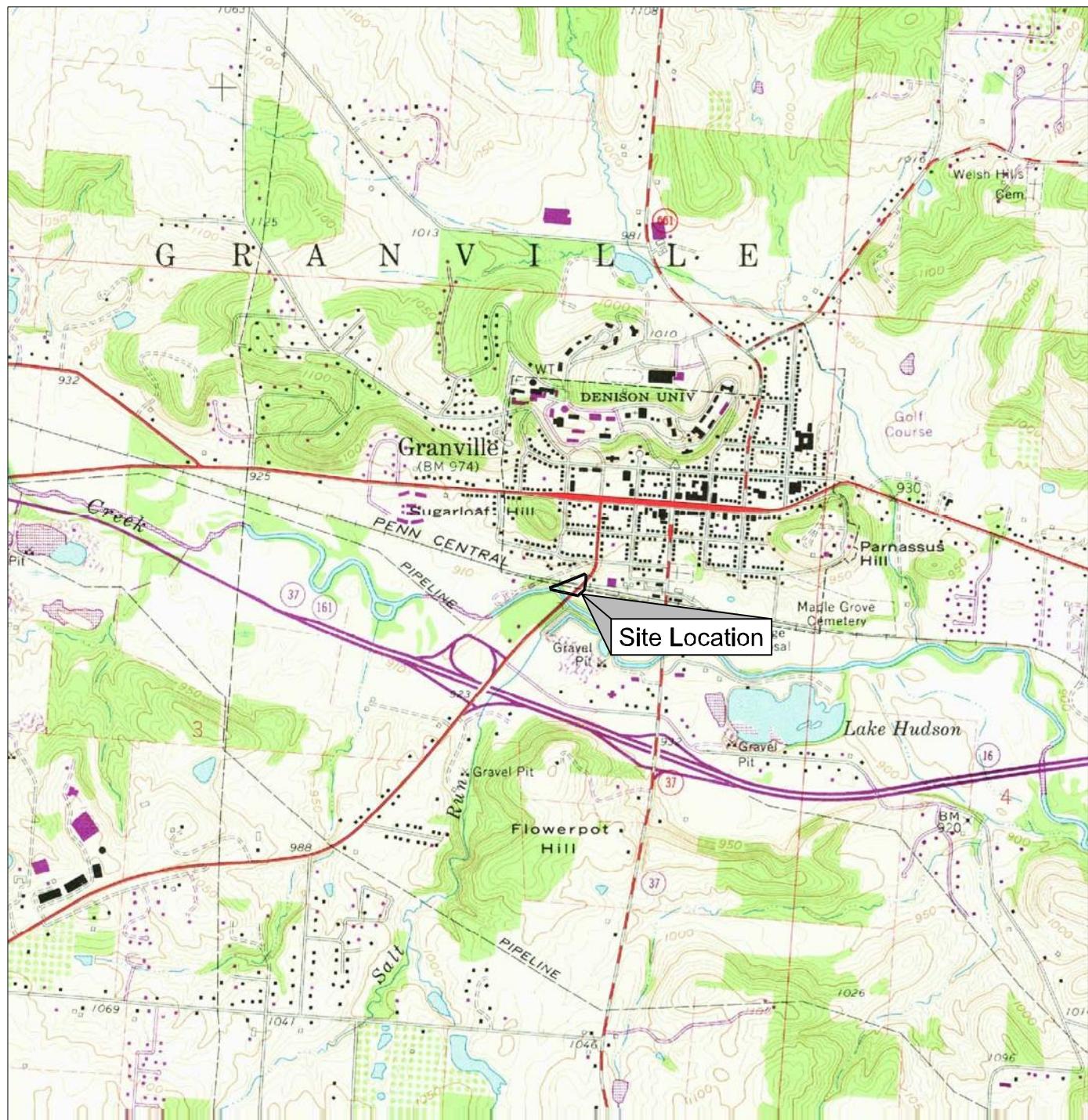
Metcalf & Eddy, 2004. Proposal to Suspend Groundwater and Soil Treatment Systems Operations and Commence Post-Shutdown Groundwater Monitoring at the Granville Solvents Site, August 2004.

Metcalf & Eddy, 2005. A Contingency Plan for the Proposal to Suspend Groundwater and Soil Treatment System Operation and Commence Post-Shutdown Groundwater Monitoring at the Granville Solvents Site, January 2005.

AECOM, 2012. Post-Remedial Action Completion Report, Granville Solvents Site, September 14, 2012.

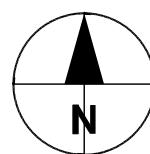
AECOM, 2013. Post-Remedial Action Completion Report Addendum, Granville Solvents Site, July 11, 2013.

Figures



Quadrangle Location

Base Taken From USGS Granville, Ohio
7.5'-Series Topographic Quadrangle.
Date 1961. Photorevised 1974.
Scale 1:24,000.



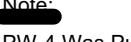
0 2000' 4000'
1" = 2000'

POTENTIOMETRIC SURFACE MAP
DECEMBER 1, 2015

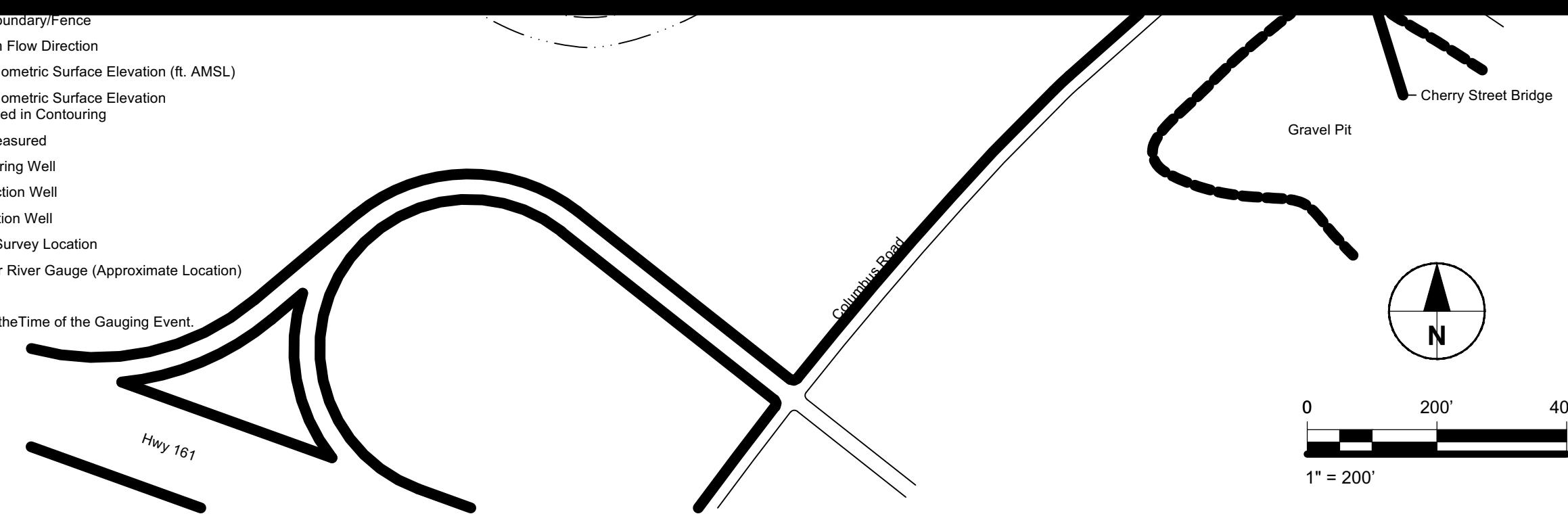
2015 ANNUAL GROUNDWATER MONITORING REPORT
GRANVILLE SOLVENTS SITE
GRANVILLE, OHIO
Project No.: 60478364 Date: 2016-01-04

Project Management Initials: Designer: NLW Checked: MJP Approved: _____
ANSI B 11" x 17"

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Filename: L:\WORK\KCAD\60478364\GRANVILLE\900 WORKING\DOCS\CAD01 MODELS\60478364 DEC 2015 PSM.DWG

-  Site Boundary/Fence
-  Stream Flow Direction
-  Potentiometric Surface Elevation (ft. AMSL)
-  Potentiometric Surface Elevation
Not Used in Contouring
-  NM Not Measured
-  Monitoring Well
-  Production Well
-  Extraction Well
-  River Survey Location
-  Former River Gauge (Approximate Location)

Note:
PW-4 Was Pumping at the Time of the Gauging Event.



Tables

Table 1. Water Level Measurements
 Granville Solvents Site
 Granville, Ohio

Well	Date	Measuring Point Elevation (ft. AMSL) ⁽¹⁾	Depth to Water (ft.)	Potentiometric Surface Elevation (ft. AMSL)
	13-May-11	915.38	13.80	901.58
	2-Nov-11		16.40	898.98
	29-May-12		15.55	899.83
	12-Nov-12		18.27	897.11
	13-Jun-13		16.55	898.83
	4-Dec-13		16.92	898.46
	1-Dec-15		17.86	897.52
	13-May-11	915.56	13.40	902.16
	2-Nov-11		16.35	899.21
	29-May-12		15.11	900.45
	12-Nov-12		18.18	897.38
	13-Jun-13		16.68	898.88
	4-Dec-13		16.82	898.74
	1-Dec-15		17.70	897.86
	13-May-11	910.75	8.80	901.95
	2-Nov-11		11.67	899.08
	29-May-12		10.45	900.30
	12-Nov-12		13.44	897.31
	13-Jun-13		11.97	898.78
	4-Dec-13		12.11	898.64
	1-Dec-15		12.98	897.77
	13-May-11	924.68	22.89	901.79
	2-Nov-11		25.55	899.13
	29-May-12		24.43	900.25
	12-Nov-12		27.36	897.32
	13-Jun-13		25.56	899.12
	4-Dec-13		26.01	898.67
	1-Dec-15		26.94	897.74
	13-May-11	959.16	57.36	901.80
	2-Nov-11		60.07	899.09
	29-May-12		58.96	900.20
	12-Nov-12		61.95	897.21
	13-Jun-13		60.24	898.92
	4-Dec-13		60.60	898.56
	1-Dec-15		61.51	897.65
	13-May-11	960.80	56.07	904.73
	Decommissioned			
	13-May-11	917.01	14.75	902.26
	2-Nov-11		17.94	899.07
	29-May-12		16.56	900.45
	12-Nov-12		19.73	897.28
	13-Jun-13		18.38	898.63
	4-Dec-13		18.39	898.62
	1-Dec-15		19.27	897.74
	13-May-11	916.17	14.05	902.12
	2-Nov-11		17.20	898.97
	29-May-12		15.88	900.29
	12-Nov-12		19.13	897.04
	13-Jun-13		17.78	898.39
	4-Dec-13		17.80	898.37
	1-Dec-15		18.66	897.51

Table 1. Water Level Measurements
 Granville Solvents Site
 Granville, Ohio

Well	Date	Measuring Point Elevation (ft. AMSL) ⁽¹⁾	Depth to Water (ft.)	Potentiometric Surface Elevation (ft. AMSL)
	13-May-11	916.65	14.29	902.36
	2-Nov-11		17.65	899.00
	29-May-12		16.16	900.49
	12-Nov-12		19.35	897.30
	13-Jun-13		18.07	898.58
	4-Dec-13		18.04	898.61
	1-Dec-15		18.86	897.79
	13-May-11	923.36	21.52	901.84
	2-Nov-11		24.16	899.20
	29-May-12		23.06	900.30
	12-Nov-12		26.04	897.32
	13-Jun-13		24.32	899.04
	4-Dec-13		24.67	898.69
	1-Dec-15		25.58	897.78
	13-May-11	920.40	18.59	901.81
	2-Nov-11		21.18	899.22
	29-May-12		20.10	900.30
	12-Nov-12		23.02	897.38
	13-Jun-13		21.31	899.09
	4-Dec-13		21.66	898.74
	1-Dec-15		22.60	897.80
	13-May-11	906.82	4.45	902.37
	2-Nov-11		7.75	899.07
	29-May-12		6.48	900.34
	12-Nov-12		9.76	897.06
	13-Jun-13		8.02	898.80
	4-Dec-13		8.32	898.50
	1-Dec-15		9.29	897.53
	13-May-11	919.94	18.07	901.87
	2-Nov-11		20.75	899.19
	29-May-12		19.64	900.30
	12-Nov-12		22.61	897.33
	13-Jun-13		20.97	898.97
	4-Dec-13		21.25	898.69
	1-Dec-15		22.18	897.76
	13-May-11	913.58	11.51	902.07
	2-Nov-11		14.45	899.13
	29-May-12		13.22	900.36
	12-Nov-12		16.26	897.32
	13-Jun-13		14.81	898.77
	4-Dec-13		14.94	898.64
	1-Dec-15		15.82	897.76
	13-May-11	905.71	3.42	902.29
	2-Nov-11		6.84	898.87
	29-May-12		5.22	900.49
	12-Nov-12		8.55	897.16
	13-Jun-13		7.35	898.36
	4-Dec-13		7.25	898.46
	1-Dec-15		8.09	897.62

Table 1. Water Level Measurements
 Granville Solvents Site
 Granville, Ohio

Well	Date	Measuring Point Elevation (ft. AMSL) ⁽¹⁾	Depth to Water (ft.)	Potentiometric Surface Elevation (ft. AMSL)
[REDACTED]	13-May-11	930.21	28.57	901.64
	2-Nov-11		31.17	899.04
	29-May-12		30.10	900.11
	12-Nov-12		33.04	897.17
	13-Jun-13		31.33	898.88
	4-Dec-13		31.70	898.51
	1-Dec-15		32.67	897.54
[REDACTED]	13-May-11	923.68	22.05	901.63
	2-Nov-11		24.68	899.00
	29-May-12		23.63	900.05
	12-Nov-12		26.56	897.12
	13-Jun-13		24.88	898.80
	4-Dec-13		25.21	898.47
	1-Dec-15		26.12	897.56
[REDACTED]	13-May-11	924.20	22.52	901.68
	2-Nov-11		25.13	899.07
	29-May-12		24.05	900.15
	12-Nov-12		26.99	897.21
	13-Jun-13		25.31	898.89
	4-Dec-13		25.64	898.56
	1-Dec-15		26.55	897.65
[REDACTED]	13-May-11	917.27	6.15	911.12
	2-Nov-11		5.40	911.87
	29-May-12		8.85	908.42
	12-Nov-12		8.26	909.01
	13-Jun-13		4.27	913.00
	4-Dec-13		7.46	909.81
	1-Dec-15		7.26	910.01
[REDACTED]	13-May-11	920.75	18.96	901.79
	2-Nov-11		21.54	899.21
	29-May-12		20.48	900.27
	12-Nov-12		23.40	897.35
	13-Jun-13		21.70	899.05
	4-Dec-13		22.05	898.70
	1-Dec-15		Obstruction at 4.3ft.	
[REDACTED]	13-May-11	921.14	19.35	901.79
	2-Nov-11		21.92	899.22
	29-May-12		20.87	900.27
	12-Nov-12		23.87	897.27
	13-Jun-13		22.10	899.04
	4-Dec-13		22.44	898.70
	1-Dec-15		23.40	897.74
[REDACTED]	13-May-11	921.79	19.72	902.07
	2-Nov-11		22.28	899.51
	29-May-12		21.24	900.55
	12-Nov-12		24.16	897.63
	13-Jun-13		22.42	899.37
	4-Dec-13		22.81	898.98
	1-Dec-15		23.74	898.05

Table 1. Water Level Measurements
 Granville Solvents Site
 Granville, Ohio

Well	Date	Measuring Point Elevation (ft. AMSL) ⁽¹⁾	Depth to Water (ft.)	Potentiometric Surface Elevation (ft. AMSL)
[REDACTED]	13-May-11	936.06	34.23	901.83
	2-Nov-11		36.86	899.20
	29-May-12		35.79	900.27
	12-Nov-12		38.73	897.33
	13-Jun-13		37.04	899.02
	4-Dec-13		37.40	898.66
	1-Dec-15		38.29	897.77
[REDACTED]	13-May-11	936.43	34.37	902.06
	2-Nov-11		37.03	899.40
	29-May-12		35.97	900.46
	12-Nov-12		38.91	897.52
	13-Jun-13		37.24	899.19
	4-Dec-13		37.59	898.84
	1-Dec-15		38.49	897.94
[REDACTED]	13-May-11	917.90	16.22	901.68
	2-Nov-11		18.78	899.12
	29-May-12		17.74	900.16
	12-Nov-12		20.60	897.30
	13-Jun-13		19.07	898.83
	4-Dec-13		19.27	898.63
	1-Dec-15		20.17	897.73
[REDACTED]	13-May-11	917.96	16.15	901.81
	2-Nov-11		18.89	899.07
	29-May-12		17.73	900.23
	12-Nov-12		20.73	897.23
	13-Jun-13		19.14	898.82
	4-Dec-13		19.39	898.57
	1-Dec-15		20.31	897.65
[REDACTED]	13-May-11	928.12	26.03	902.09
	2-Nov-11		29.05	899.07
	29-May-12		27.89	900.23
	12-Nov-12		30.91	897.21
	13-Jun-13		29.35	898.77
	4-Dec-13		29.57	898.55
	1-Dec-15		30.43	897.69
[REDACTED]	13-May-11	927.84	26.01	901.83
	2-Nov-11		28.83	899.01
	29-May-12		27.85	899.99
	12-Nov-12		30.69	897.15
	13-Jun-13		29.15	898.69
	4-Dec-13		29.39	898.45
	1-Dec-15		30.22	897.62
[REDACTED]	13-May-11	924.00	22.15	901.85
	2-Nov-11		24.71	899.29
	29-May-12		23.65	900.35
	12-Nov-12		26.60	897.40
	13-Jun-13		24.88	899.12
	4-Dec-13		25.23	898.77
	1-Dec-15		26.15	897.85

Table 1. Water Level Measurements
 Granville Solvents Site
 Granville, Ohio

Well	Date	Measuring Point Elevation (ft. AMSL) ⁽¹⁾	Depth to Water (ft.)	Potentiometric Surface Elevation (ft. AMSL)
[REDACTED]	13-May-11	909.06	6.77	902.29
	28-Oct-11		8.33	900.73
	29-May-12		8.49	900.57
	12-Nov-12		11.75	897.31
	13-Jun-13		10.59	898.47
	4-Dec-13		10.43	898.63
	1-Dec-15		11.26	897.80
[REDACTED]	13-May-11	908.95	7.88	901.07
	28-Oct-11		9.17	899.78
	29-May-12		NC	NC
	12-Nov-12		13.50	895.45
	13-Jun-13		28.85	880.10
	4-Dec-13		12.13	896.82
	1-Dec-15		12.70	896.25
[REDACTED]	13-May-11	910.27	8.46	901.81
	28-Oct-11		10.17	900.10
	29-May-12		10.63	899.64
	12-Nov-12		14.54	895.73
	13-Jun-13		10.28	899.99
	4-Dec-13		23.72	886.55
	1-Dec-15		13.84	896.43
[REDACTED]	13-May-11	910.59	34.81	875.78
	28-Oct-11		10.50	900.09
	29-May-12		44.89	865.70
	12-Nov-12		16.49	894.10
	13-Jun-13		9.33	901.26
	4-Dec-13		12.21	898.38
	1-Dec-15		41.55	869.04
Racoon Creek (Old Location) ⁽²⁾	13-May-11	904.73	5.18	899.55
	3-Nov-11		4.30	900.43
	5-May-12		4.10	900.63
Racoon Creek (New Location) ⁽³⁾	12-Nov-12	912.56	13.47	899.09
	13-Jun-13	918.04	18.37	899.67
	4-Dec-13	918.50	18.90	899.60
	1-Dec-15	918.51	19.13	899.38

ft - feet

amsl - above mean sea level

* Well equipped with a dedicated sampling pump.

** Dedicated sampling pump removed

⁽¹⁾ Based on Top of Casing survey conducted May 2011.

⁽²⁾ 11/12/12: Old Creek Gauge Missing/Destroyed. Elevation derived from new survey location with laser level at Creek adjacent to bridge foundation and tied into MW-03⁽³⁾ as benchmark. Calculations available upon request.
 NC - PW-02 guide pipe for gauging to narrow for Solinst 122 WL probe.

Comparison of Water Elevations between December 2013 and December 2015

Average December 2013 (ft.):	898.56
Average December 2015 (ft.):	897.17
Change in Average (ft.):	-1.39

Table 2. Monitoring Well Purging Data
 Granville Solvents Site
 Granville, Ohio

Well	Date	Total Volume Purged (gal.)	Turbidity (NTU)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Specific Conductance ($\mu\text{S}/\text{cm}$)	Temp (°C)
[REDACTED]	14-Nov-12	1.75	9.00	6.99	1.58	198	3,739	11.53
			8.63	6.98	1.53	196	3,729	11.72
			6.28	6.99	1.47	194	3,724	11.73
	13-Jun-13	3.25	7.70	7.11	3.21	149	841	12.18
			8.97	7.10	3.16	150	841	12.20
			5.4	7.11	3.14	149	841	12.21
	6-Dec-13	2.25	24.64	8.07	3.80	299	4,739	11.38
			27.68	8.04	3.93	299	4,857	11.53
			21.27	8.04	3.68	299	4,942	11.41
	2-Dec-15	2.25	9.83	7.16	2.77	196	1,111	11.70
			7.65	7.16	2.64	194	1,111	11.68
			7.91	7.17	2.58	192	1,111	11.69
[REDACTED]	14-Nov-12	1.50	11.32	6.87	2.01	202	3,710	11.85
			10.64	6.86	1.97	200	3,721	11.87
			11.04	6.86	1.94	199	3,726	11.84
	14-Jun-13	2.25	9.55	7.05	5.70	199	696	21.70
			7.52	7.06	5.69	197	694	21.70
			6.31	7.05	5.65	195	696	21.70
	6-Dec-13	2.75	28.14	7.74	4.56	329	18790 ⁽¹⁾	11.84
			23.47	7.49	4.57	324	19,110	11.83
			18.55	7.22	4.54	320	19,340	11.76
	2-Dec-15	No purge	Obstruction in well prevented purge/sample.					
[REDACTED]	14-Nov-12	1.60	3.71	6.91	1.31	223	4,344	11.33
			4.30	6.90	1.25	221	4,352	11.45
			4.55	6.90	1.20	220	4,357	11.35
	13-Jun-13	1.75	1.99	7.06	1.05	130	904.8	13.76
			2.22	7.06	1.13	130	906.3	13.62
			2.32	7.06	1.15	130	906.0	13.58
	4-Dec-13	2.00	5.25	8.27	3.57	207	1,085	13.24
			5.84	8.26	3.60	205	1,086	13.21
			3.65	8.24	3.63	202	1,084	13.20
	2-Dec-15	2.50	0.59	7.16	2.75	196	1,146	12.43
			0.23	7.16	2.80	194	1,147	12.49
			0.33	7.16	2.86	193	1,146	12.54
[REDACTED]	2-Dec-15	2.15	5.82	6.86	1.71	209	1,177	14.93
			2.25	6.85	1.71	205	1,178	14.94
			1.77	6.85	1.70	202	1,178	14.98
	13-Nov-12	1.15	1.40	6.77	0.13	84	2,041	13.92
			1.00	6.77	0.12	84	2,077	13.92
			0.97	6.77	0.10	84	2,103	13.95
	14-Jun-13	2.00	4.53	7.00	0.05	191	1,024	15.40
			5.27	7.00	0.03	188	1,025	15.49
			9.03	6.99	0.02	186	1,026	15.60
	5-Dec-13	2.50	5.84	7.74	1.78	166	1,754	14.74
			6.37	7.74	7.81	167	1,789	14.67
			9.67	7.71	2.02	170	1,812	14.59
	2-Dec-15	2.50	28.39	7.04	0.14	193	1,213	13.69
			27.24	7.04	0.12	188	1,213	13.70
			28.05	7.04	0.10	184	1,212	13.70
[REDACTED]	13-Nov-12	1.30	3.50	6.92	1.24	77	3,433	10.39
			3.50	6.92	1.24	77	3,433	10.39
			3.50	6.93	1.27	83	3,434	10.26
	14-Jun-13	3.00	0.75	7.19	6.81	143	620	12.93
			0.56	7.20	6.48	144	623	12.88
			0.58	7.20	6.20	144	626	12.95
	5-Dec-13	2.25	2.74	7.99	6.65	212	4,510	11.80
			1.43	7.97	6.41	210	4,549	11.82
			1.05	7.97	6.08	209	4,586	11.79
	3-Dec-15	3.00	0.99	7.03	1.54	NC ⁽²⁾	837.9	11.35
			0.76	7.03	1.37	NC ⁽²⁾	840.7	11.34
			0.87	7.03	1.21	223	842.7	11.33

Table 2. Monitoring Well Purging Data
 Granville Solvents Site
 Granville, Ohio

Well	Date	Total Volume Purged (gal.)	Turbidity (NTU)	pH	Dissolved Oxygen (mg/L)	Oxidation Reduction Potential (mV)	Specific Conductance ($\mu\text{S}/\text{cm}$)	Temp (°C)
[REDACTED]	13-Nov-12	1.65	0.00	7.11	4.72	136	1,217	12.53
			0.00	7.12	4.70	136	1,242	12.50
			0.00	7.12	4.66	136	1,257	12.65
	13-Jun-13	2.25	4.88	7.30	5.72	151	960	12.86
			4.03	7.30	5.73	151	963	12.80
			3.21	7.31	5.65	151	962	12.75
	5-Dec-13	3.50	0.72	7.72	4.33	183	1,498	13.11
			0.87	7.76	4.29	182	1,528	13.11
			0.57	7.73	4.26	182	1,548	13.11
	2-Dec-15	2.00	5.59	7.31	4.25	204	1,194	12.17
			5.25	7.32	4.11	203	1,193	12.25
			4.37	7.33	4.02	202	1,194	12.29
[REDACTED]	13-Nov-12	1.75	22.19	6.92	0.33	87	1,844	11.57
			20.16	6.92	0.27	82	1,856	11.46
			20.11	6.92	0.21	79	1,865	11.49
	14-Jun-13	2.25	18.1	7.22	0.11	75	702	13.51
			18.3	7.21	0.09	74	692	13.01
			17.7	7.21	0.07	72	688	12.73
	5-Dec-13	2.50	9.46	8.00	0.21	107	2,176	12.05
			7.60	8.03	0.16	103	2,191	12.00
			7.00	8.00	0.14	100	2,202	11.95
	2-Dec-15	3.00	4.75	7.23	0.11	183	747.4	11.93
			6.12	7.23	0.09	178	747.3	11.92
			6.49	7.23	0.07	175	747.8	11.89
	14-Nov-12	2.3	9.30	6.93	0.06	-75	1,350	13.80
			8.10	6.93	0.05	-76	1,364	13.83
			6.00	6.93	0.04	-77	1,378	13.81
	14-Jun-13	2.65	8.44	7.26	0.07	-55	615	15.05
			6.22	7.27	0.06	-58	614	14.80
			8.25	7.27	0.05	-59	610	14.60
	5-Dec-13	2.3	2.83	7.70	0.18	-56	1,704	14.29
			2.85	7.71	0.16	-60	1,725	14.26
			1.68	7.76	0.15	-65	1,744	14.23
	2-Dec-15	4.5	12.09	7.08	0.14	-52	1,708	13.59
			10.75	7.08	0.12	-55	1,714	13.55
			8.73	7.08	0.11	-57	1,714	13.55
[REDACTED]	14-Nov-12	2.50	8.10	6.83	1.20	235	4,144	12.70
			8.46	6.84	1.23	233	4,157	12.65
			7.85	6.84	1.28	231	4,152	12.68
	14-Jun-13	2.80	7.10	7.11	2.02	140	839	13.28
			6.61	7.10	1.92	139	839	13.24
			5.16	7.11	1.87	137	839	13.19
	6-Dec-13	2.50	7.75	8.26	2.30	289	5,017	12.62
			5.75	8.25	2.33	288	5,046	12.71
			4.31	8.24	2.36	288	5,069	12.72
	3-Dec-15	2.50	14.92	6.98	1.06	219	1,013	12.69
			15.45	6.97	1.06	218	1,013	12.73
			14.34	6.98	1.03	217	1,016	12.71
	3-Nov-11	2.0	3.2	7.06	0.30	-104	1,140	13.83
			3.2	7.08	0.24	-109	1,150	13.96
			3.4	7.09	0.24	-112	1,150	14.05

Notes:

Purge data represents the last three consecutive readings collected prior to sampling.

Troll 9500 water quality Instrument w/Optical DO used to collect water quality readings on Nov-12. Horiba U-52 used prior to.

NC - Not collected due to faulty reading.

(¹) Issue with conductivity sensor. Recalibrated after completing well.

Table 3. Summary of Groundwater Analytical Results
 Granville Solvents Site
 Granville, Ohio

Sample Location	Sample Date	PCE ($\mu\text{g}/\text{L}$)	TCE ($\mu\text{g}/\text{L}$)	cis-1,2-DCE ($\mu\text{g}/\text{L}$)	trans-1,2-DCE ($\mu\text{g}/\text{L}$)	1,1,1-TCA ($\mu\text{g}/\text{L}$)
MCL		5	5	70	100	200
MW-02D	8-May-96	430.0	590.0	250.0	0	350.0
	1-May-97	390.0	450.0	140.0	0	250.0
	1-May-98	400.0	380.0	110.0	0	220.0
	1-May-99	190.0	220.0	40.0	0	120.0
	1-May-00	210.0	220.0	42.0	0	120.0
	1-May-01	230.0	170.0	38.0	0	93.0
	6-May-02	160.0	120.0	13.0	0	55.0
	6-May-03	130.0	90.0	9.8	<2.2	40.0
	10-May-04	68.0	34.0	6.6	<1.7	17.0
	10-Aug-05	110.0	59.0	17.0	<0.84	36.0
	4-May-06	51.0	63.0	16.0	<2.5	31.0
	20-Jul-06	69.0	60.0	15.0	<1.3	29.0
	16-May-07	130.0	130.0	28.0	1.1	71.0
	25-Sep-07	150.0	120.0	28.0	1.5	71.0
	25-Apr-08	140.0	150.0	38.0	1.7	81.0
	5-Sep-08	180.0	190.0	48.0	2.1	120.0
	31-Mar-09	150.0	180.0	1.7	2.5	98.0
	15-Sep-09	150.0	220.0	43.0	2.6	110.0
	11-May-11	140.0	190.0	35.0	2.4	100.0
	3-Nov-11	130.0	200.0	30.0	1.5	110.0
	30-May-12	180.0	350.0	41.0	2.4	200.0
	14-Nov-12	190.0	320.0	32.0	0.1	190.0
	13-Jun-13	120.0	260.0	35.0	2.0	140.0
	6-Dec-13	140.0	310.0	43.0	2.4	140.0
	2-Dec-15	230.0	580.0	25.0	1.4	270.0
MW-04D	8-May-96	110.0	280	150	0	110
	1-May-97	66.0	440	97	0	170
	1-May-98	130.0	680	77	0	220
	1-May-99	64.0	360	59	0	100
	1-May-00	92.0	600	33	0	170
	1-May-01	510.0	320	93	0	68
	27-Feb-02	36.0	150	49	<3.2	45
	5-Aug-02	63.0	150	33	<4.6	40
	6-Nov-02	59.0	340	<6.4	<6.4	130
	26-Feb-03	40.0	120	48	<3.2	35
	6-May-03	59.0	190	32	<4.8	59
	27-Aug-03	45.0	120	47	1.5	42
	10-May-04	41.0	73	26	0.79	23
	10-Aug-05	72.0	130	3.7	<0.84	43
	4-May-06	54.0	100	<2.5	<2.5	38
	19-Jul-06	83.0	150	<6.2	<3.8	59
	16-May-07	64.0	110	15	0.83	44
	25-Sep-07	120.0	270	9.4	0.48	130
	25-Apr-08	56.0	51	7.7	0.43	28

Table 3. Summary of Groundwater Analytical Results
 Granville Solvents Site
 Granville, Ohio

Sample Location	Sample Date	PCE ($\mu\text{g}/\text{L}$)	TCE ($\mu\text{g}/\text{L}$)	cis-1,2-DCE ($\mu\text{g}/\text{L}$)	trans-1,2-DCE ($\mu\text{g}/\text{L}$)	1,1,1-TCA ($\mu\text{g}/\text{L}$)
MCL		5	5	70	100	200
MW-04D	5-Sep-08	64.0	65	13	0.71	28
	31-Mar-09	64.0	91	<0.5	0.75	40
	15-Sep-09	90.0	180	16	0.90	64
	11-May-11	79.0	91	5.7	0.33 J	46
	2-Nov-11	59.0	86	6.1	<0.5	46
	30-May-12	46.0	59	0.62	<0.5	38
	14-Nov-12	68.0	160	<5.0*	<5.0*	100
	14-Jun-13	49.0	79	1.5	<0.5	47
	6-Dec-13	56.0	99	1.4	0.100	51
	Not Sampled due to obstruction in well.					
MW-06	8-May-96	---	78.0	---	---	380
	1-May-97	---	47.0	---	---	430
	1-May-98	---	36.0	---	---	370
	1-May-99	---	23.0	---	---	330
	1-May-00	---	26.0	---	---	320
	1-May-01	---	31.0	---	---	340
	6-May-02	---	19.0	---	---	230
	26-Feb-03	---	0.10	---	---	0
	5-May-03	---	20.0	---	---	200
	10-May-04	---	10.0	---	---	180
	10-Aug-05	---	7.8	---	---	130
	4-May-06	2.8	12.0	---	---	130
	20-Jul-06	---	10.0	---	---	170
	17-May-07	---	13.0	---	---	220
	25-Sep-07	0.62	17.0	---	---	220
	25-Apr-08	0.61	16.0	---	---	180
	5-Sep-09	0.62	16.0	---	---	180
	31-Mar-09	0.49	13.0	---	---	180
	5-Sep-09	0.83	19.0	---	---	170
	11-May-11	0.68	16.0	---	---	140
	3-Nov-11	0.81	14.0	---	---	130
	1-Jun-12	---	15.0	---	---	150
	14-Nov-12	<5.0*	19.0	---	---	220
	13-Jun-13	0.80	19.0	---	---	170
	4-Dec-13	0.45 J	14.0	---	---	160
	2-Dec-15	0.66	15.0	---	---	190
MW-07	8-Oct-91	1.6	3.9	1.3	---	1.0
	22-Jan-92	---	---	---	---	8.0
	19-Jun-92	---	---	---	---	---
	27-Apr-93	---	---	---	---	---
	5-Aug-93	---	---	---	---	---
	12-May-94	---	---	---	---	---
	13-May-96	---	---	---	---	---
	4-May-06	1.6	---	---	---	---
	17-May-07	---	---	---	---	---
	2-Dec-15	---	---	---	---	---

Table 3. Summary of Groundwater Analytical Results
 Granville Solvents Site
 Granville, Ohio

Sample Location	Sample Date	PCE ($\mu\text{g}/\text{L}$)	TCE ($\mu\text{g}/\text{L}$)	cis-1,2-DCE ($\mu\text{g}/\text{L}$)	trans-1,2-DCE ($\mu\text{g}/\text{L}$)	1,1,1-TCA ($\mu\text{g}/\text{L}$)
MCL		5	5	70	100	200
MW-07D	8-May-96	---	---	---	---	---
	5-May-97	---	---	---	---	---
	4-May-98	---	---	---	---	---
	10-May-99	---	---	---	---	---
	15-May-00	---	---	---	---	---
	23-May-01	---	---	---	---	---
	6-May-02	---	---	---	---	---
	5-May-03	---	---	---	---	---
	10-May-04	---	---	---	---	---
	10-Aug-05	---	---	---	---	---
	4-May-06	---	---	---	---	---
	19-Jul-06	---	---	---	---	---
	17-May-07	---	---	---	---	---
	25-Sep-07	---	---	---	---	---
	25-Apr-08	---	---	---	---	---
	5-Sep-08	---	---	---	---	---
	31-Mar-09	---	---	---	---	---
	14-Sep-09	---	---	---	---	---
	10-May-11	---	---	---	---	---
	3-Nov-11	---	---	---	---	---
	1-Jun-12	---	---	---	---	---
	13-Nov-12	---	---	---	---	---
	14-Jun-13	---	---	---	---	---
	5-Dec-13	---	---	---	---	---
	2-Dec-15	---	---	---	---	---
MW-08	8-May-96	---	---	---	---	---
	10-Dec-96	---	---	49	5.0	---
	19-Feb-97	---	---	55	5.8	---
	5-May-97	---	---	1.0	1.0	---
	12-Aug-97	---	0.9	36	3.0	---
	12-Dec-97	---	---	56	6.0	---
	1-Feb-98	---	---	50	5.4	---
	4-May-98	---	---	44	4.0	---
	6-Aug-98	---	---	51	5.4	---
	19-Nov-98	---	---	65	1.0	---
	5-Feb-99	---	---	45	3.3	---
	10-May-99	---	---	29	2.4	---
	5-Aug-99	---	---	79	8.0	---
	4-Nov-99	---	---	1.0	1.0	---
	2-Feb-00	---	---	85	9.9	---
	15-May-00	---	---	99	10	---
	21-Aug-00	---	---	75	8.3	---
	7-Nov-00	---	---	76	8.2	---
	23-May-01	---	---	69	7.4	---
	28-Nov-01	---	---	68	7.8	---
	27-Feb-02	---	---	68	6.9	---
	6-May-02	---	---	45	3.8	---

Table 3. Summary of Groundwater Analytical Results
 Granville Solvents Site
 Granville, Ohio

Sample Location	Sample Date	PCE ($\mu\text{g}/\text{L}$)	TCE ($\mu\text{g}/\text{L}$)	cis-1,2-DCE ($\mu\text{g}/\text{L}$)	trans-1,2-DCE ($\mu\text{g}/\text{L}$)	1,1,1-TCA ($\mu\text{g}/\text{L}$)
MCL		5	5	70	100	200
MW-08	5-Aug-02	---	---	60	5.0	---
	5-Nov-02	---	---	67	6.8	---
	26-Feb-03	---	---	77	7.8	---
	5-May-03	---	---	69	7.0	---
	27-Aug-03	---	---	56	6.4	---
	11-Nov-03	---	---	74	7.2	---
	3-Feb-04	---	---	53	4.8	---
	10-May-04	---	---	46	4.3	---
	4-Aug-04	---	---	70	7.2	---
	1-Feb-05	---	---	24	2.1	---
	11-Aug-05	---	---	36	3.6	---
	4-May-06	---	---	45	4.7	---
	20-Jul-06	---	---	28	3.1	---
	16-May-07	---	---	26	2.3	---
	25-Sep-07	---	---	73	9.3	---
	25-Apr-08	---	---	24	2.6	---
	5-Sep-08	---	---	34	3.7	---
	31-Mar-09	---	---	40	5.1	---
	14-Sep-09	---	---	68	8.9	---
	10-May-11	---	---	36	5.1	---
	3-Nov-11	---	---	34	4.5	---
	31-May-12	---	---	17	2.0	---
	13-Nov-12	---	---	70	8.2	---
	14-Jun-13	---	---	32	4.1	---
	5-Dec-13	---	---	23	3.3	---
	3-Dec-15	---	---	46	7.2	---
MW-P1	8-May-96	540	1400	---	---	720
	6-May-97	340	730	---	---	460
	5-May-98	370	550	---	---	380
	10-May-99	170	380	---	---	350
	15-May-00	160	420	---	---	300
	23-May-01	180	330	---	---	300
	27-Feb-02	94	150	---	---	150
	6-May-02	110	140	---	---	130
	5-Aug-02	100	120	---	---	130
	6-Nov-02	120	110	---	---	82
	26-Feb-03	100	88	---	---	86
	6-May-03	100	88	---	---	100
	27-Aug-03	110	56	---	---	60
	10-May-04	53	55	---	---	160
	10-Aug-05	60	41	---	---	60
	4-May-06	45	36	---	---	38
	19-Jul-06	43	32	---	---	35
	16-May-07	50	36	---	---	39
	25-Sep-07	88	42	---	---	55
	25-Apr-08	19	21	2.3	---	12
	5-Sep-08	42	32	1.3	---	27

Table 3. Summary of Groundwater Analytical Results
 Granville Solvents Site
 Granville, Ohio

Sample Location	Sample Date	PCE ($\mu\text{g}/\text{L}$)	TCE ($\mu\text{g}/\text{L}$)	cis-1,2-DCE ($\mu\text{g}/\text{L}$)	trans-1,2-DCE ($\mu\text{g}/\text{L}$)	1,1,1-TCA ($\mu\text{g}/\text{L}$)
MCL		5	5	70	100	200
MW-P1	31-Mar-09	41	27	---	0.33	22
	14-Sep-09	67	38	1.5	---	31
	11-May-11	83	34	1.9	---	29
	2-Nov-11	45	33	1.6	---	22
	30-May-12	54	33	---	---	30
	13-Nov-12	63	34	---	---	27
	13-Jun-13	49	41	0.7	---	28
	5-Dec-13	67	40	---	---	29
	2-Dec-15	68	40	---	---	28
GSSMW-08	9-May-96	---	---	---	---	---
	27-Aug-96	---	---	---	---	---
	10-Dec-96	---	---	---	---	---
	19-Feb-97	---	---	---	---	---
	5-May-97	---	---	---	---	---
	12-Aug-97	---	0.58	---	---	---
	11-Dec-97	---	---	---	---	---
	1-Feb-98	---	---	---	---	---
	4-May-98	---	---	---	---	---
	6-Aug-98	---	---	---	---	---
	19-Nov-98	---	---	---	---	---
	5-Feb-99	---	---	---	---	---
	10-May-99	---	---	---	---	---
	5-Aug-99	---	---	---	---	---
	2-Feb-00	---	---	---	---	---
	15-May-00	---	---	---	---	---
	21-Aug-00	---	---	---	---	---
	5-Feb-01	---	---	---	---	---
	23-May-01	---	---	---	---	---
	1-Aug-01	---	---	---	---	---
	28-Nov-01	---	---	---	---	---
	27-Feb-02	---	---	---	---	---
	6-May-02	---	---	---	---	---
	5-Aug-02	---	---	---	---	---
	5-Nov-02	---	---	---	---	---
	26-Feb-03	---	---	---	---	---
	5-May-03	---	---	---	---	---
	27-Aug-03	---	---	---	---	---
	11-Nov-03	---	---	---	---	---
	3-Feb-04	---	---	---	---	---
	10-May-04	---	---	---	---	---
	4-Aug-04	---	---	---	---	---
	1-Feb-05	---	---	---	---	---
	11-Aug-05	---	---	---	---	---
	4-May-06	---	---	---	---	---
	20-Jul-06	---	---	---	---	---
	17-May-07	---	---	---	---	---
	25-Sep-07	---	---	---	---	---

Table 3. Summary of Groundwater Analytical Results
 Granville Solvents Site
 Granville, Ohio

Sample Location	Sample Date	PCE ($\mu\text{g}/\text{L}$)	TCE ($\mu\text{g}/\text{L}$)	cis-1,2-DCE ($\mu\text{g}/\text{L}$)	trans-1,2-DCE ($\mu\text{g}/\text{L}$)	1,1,1-TCA ($\mu\text{g}/\text{L}$)
MCL		5	5	70	100	200
GSSMW-08	25-Apr-08	---	---	---	---	---
	4-Sep-08	---	---	---	---	---
	30-Mar-09	---	---	---	---	---
	14-Sep-09	---	---	---	---	---
	10-May-11	---	---	---	---	---
	3-Nov-11	---	---	---	---	---
	31-May-12	---	---	---	---	---
	13-Nov-12	---	---	---	---	---
	14-Jun-13	---	---	---	---	---
	5-Dec-13	---	---	---	---	---
	2-Dec-15	---	---	---	---	---
GSSMW-09	9-May-96	---	---	---	---	---
	27-Aug-96	---	---	---	---	---
	10-Dec-96	---	---	---	---	---
	19-Feb-97	---	---	---	---	---
	5-May-97	---	---	---	---	---
	12-Aug-97	---	---	---	---	---
	11-Dec-97	---	---	---	---	---
	1-Feb-98	---	---	---	---	---
	4-May-98	---	---	---	---	---
	6-Aug-98	---	---	---	---	---
	19-Nov-98	---	---	---	---	---
	5-Feb-99	---	---	---	---	---
	10-May-99	---	---	---	---	---
	5-Aug-99	---	---	---	---	---
	4-Nov-99	---	---	---	---	---
	2-Feb-00	---	---	---	---	---
	15-May-00	---	---	---	---	---
	21-Aug-00	---	---	---	---	---
	7-Nov-00	---	---	---	---	---
	5-Feb-01	---	---	---	---	---
	23-May-01	---	---	---	---	---
	1-Aug-01	---	---	---	---	---
	28-Nov-01	---	---	---	---	---
	27-Feb-02	---	---	---	---	---
	6-May-02	---	---	---	---	---
	5-Aug-02	---	---	---	---	---
	5-Nov-02	---	---	---	---	---
	26-Feb-03	---	---	---	---	---
	5-May-03	---	---	---	---	---
	27-Aug-03	---	---	---	---	---
	11-Nov-03	---	---	---	---	---
	3-Feb-04	---	---	0.28	---	---
	10-May-04	---	---	---	---	---
	4-Aug-04	---	---	---	---	---
	1-Feb-05	---	---	---	---	---
	11-Aug-05	---	---	---	---	---

Table 3. Summary of Groundwater Analytical Results
 Granville Solvents Site
 Granville, Ohio

Sample Location	Sample Date	PCE ($\mu\text{g}/\text{L}$)	TCE ($\mu\text{g}/\text{L}$)	cis-1,2-DCE ($\mu\text{g}/\text{L}$)	trans-1,2-DCE ($\mu\text{g}/\text{L}$)	1,1,1-TCA ($\mu\text{g}/\text{L}$)
MCL		5	5	70	100	200
GSSMW-09	4-May-06	---	---	---	---	---
	20-Jul-06	---	---	---	---	---
	16-May-07	---	---	---	---	---
	25-Sep-07	---	---	---	---	---
	25-Apr-08	---	---	---	---	---
	5-Sep-08	---	0.24	---	---	---
	31-Mar-09	---	---	---	---	---
	14-Sep-09	---	---	---	---	---
	10-May-11	---	---	---	---	---
	3-Nov-11	No Sample - Well Seal Compromised to Surface Water/Sediment.				
	31-May-12	---	---	---	---	---
	13-Nov-12	---	---	---	---	---
	14-Jun-13	---	---	---	---	---
	5-Dec-13	---	---	---	---	---
	2-Dec-15	---	---	---	---	---
GSSMW-15	9-Sep-05	6.1	25	6.1	---	21
	4-May-06	7.2	22	4.1	---	19
	14-Jun-06	13	23	6.0	---	19
	19-Jul-06	8.6	24	7.1	---	18
	16-May-07	7.8	37	13	0.74	30
	25-Sep-07	12	35	10	0.67	33
	25-Apr-08	11	41	17	1.2	35
	5-Sep-08	12	47	19	1.2	37
	31-Mar-09	8.9	35	9	0.61	30
	15-Sep-09	26	38	11	0.72	30
	11-May-11	12	44	11	0.74	34
	3-Nov-11	9.1	32	12	0.94	29
	30-May-12	9.2	43	20	1.4	42
	13-Nov-12	10	49	17	0.93	45
	14-Jun-13	11	50	15	1.0	44
	6-Dec-13	13	61	20	1.6	46
	3-Dec-15	11	55	19	1.7	45
GSSEW-01	20-Jul-06	---	---	---	---	---
	17-May-07	---	---	0.50	---	---
	25-Apr-08	---	---	---	---	---
	30-Mar-09	---	---	0.79	---	---
	10-May-11	---	---	0.58	---	---
	3-Nov-11	---	---	---	---	---

Notes:

All results expressed in $\mu\text{g}/\text{l}$ (parts per billion)

--- : Results are non-detect (below RL).

MCL - Maximum contaminant level; TCE - Trichloroethene; DCE - cis-1,2-Dichloroethene

PCE - Tetrachloroethene; trans-1,2-DCE - trans-1,2-Dichloroethene; 1,1,1-TCA - 1,1,1-Trichloroethane

* - Lab attributed a Dilution Factor of 10 to this sample resulting in an elevated RL.

** - Lab attributed a Dilution Factor of 20 to this sample resulting in an elevated RL.

0 - Non-detected result, laboratory detection limit unknown

J - Sample result is estimated

Appendix A

Sampling Procedure Change Notification - May 8, 2012



AECOM
4219 Malsbary Road
Cincinnati, Ohio 45242
www.aecom.com

513 878 6880 tel
513 878 6848 fax

May 8, 2012

Sheila A. Sullivan
Remedial Project Manager
Superfund Division
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

**Subject: Procedure Change Notification
Groundwater Monitoring Program
Granville Solvents Site
Granville, Licking County, Ohio
USEPA ID: OHD004495412**

Dear Ms. Sullivan,

AECOM, on behalf of the Granville Solvents Site Removal Management Group, LLC, is submitting this notification regarding groundwater sampling procedures at the referenced site. These revised procedures will be used for the 2012 semi-annual and subsequent sampling events. The following provides an explanation for and description of the change.

Performance monitoring is defined by the Post-Shutdown Contingency Plan (Contingency Plan) dated January 31, 2005. The Contingency Plan includes a groundwater monitoring program consisting of semi-annual sampling of a minimum of eight (8) designated wells. Collected samples have been analyzed for VOCs following the procedures outlined in the *Groundwater Monitoring Program Plan for the Granville Solvents Site in Granville, Ohio* (M&E 1995) (Groundwater Monitoring Plan). Procedures for sampling groundwater are outlined in Sections 4.6 and 5.2.4 of the Groundwater Monitoring Plan and generally consist of using a submersible pump to purge 3 to 5 well volumes followed by extracting groundwater at a rate of 100 mL per minute to fill the sample vials.

The submersible pumps currently utilized at the site to collect groundwater samples consist of a Grundfos™ dedicated sampling pump and dedicated tubing. The pumps and tubing are in poor condition and several are not functional. The seals on most of the wellhead manifolds are not water tight, potentially causing any surface water entering the flush-mount boxes to enter the well casing.

In order to meet the requirement in Section 4.6 of the Groundwater Monitoring Plan to collect groundwater samples that are representative of groundwater within the aquifer at each monitoring well location, the monitoring wells will be purged and sampled using the following low-flow methods.

Purging

A non-dedicated pneumatic or electric submersible bladder pump with pump controller will be utilized to purge each monitoring well. The pump will be slowly lowered to the mid-point of the well screen and the pumping rate (100-500 mL/min.) for each well will be adjusted until it will be equal to the natural groundwater flow velocity. This will be determined by measuring water column levels during pumping. A water quality meter with a flow-through cell will be utilized to monitor groundwater stabilization criteria, which will be collected every 3 to 5 minutes. A minimum of 3 sets of indicator parameters will be collected followed by additional sets until 3 consecutive readings meet the stabilization criteria. The well will be considered purged after the following parameters have stabilized:

Parameter	Stabilization Criteria
pH	± 0.1
Specific electric conductance	$\pm 3\%$
Temperature	$\pm 0.5^{\circ}\text{C}$
Turbidity	$\pm 10\%$ (when turbidity will be greater than 10 NTUs)

The pump used to purge and sample the wells will be decontaminated between sampling locations in accordance with Section 5.2.1 of the Groundwater Monitoring Plan. New disposable polyethylene bladders and tubing will be used between each well.

Sampling

The submersible pump and low-flow methods will be used to collect the groundwater samples. The in-line, flow-through water quality cells used during well purging will be disconnected prior to filling the sample bottles.

The existing dedicated sampling pump and tubing at each of the following wells will be replaced with a standard water-tight cap:

- MW-02D
- MW-04D
- MW-06
- MW-07D
- MW-08
- MW-P1
- GSSMW-15
- GSSEW-01
- GSSMW-08; and
- GSSMW-09.

Sampling reports will include a summary of the purge data and any deviations from this procedure will be noted.

If you have any questions regarding this procedure change, please contact me at (513) 878-6844 or e-mail me at ron.roelker@aecom.com.

Sincerely yours,



Ron Roelker, PE
Senior Project Manager



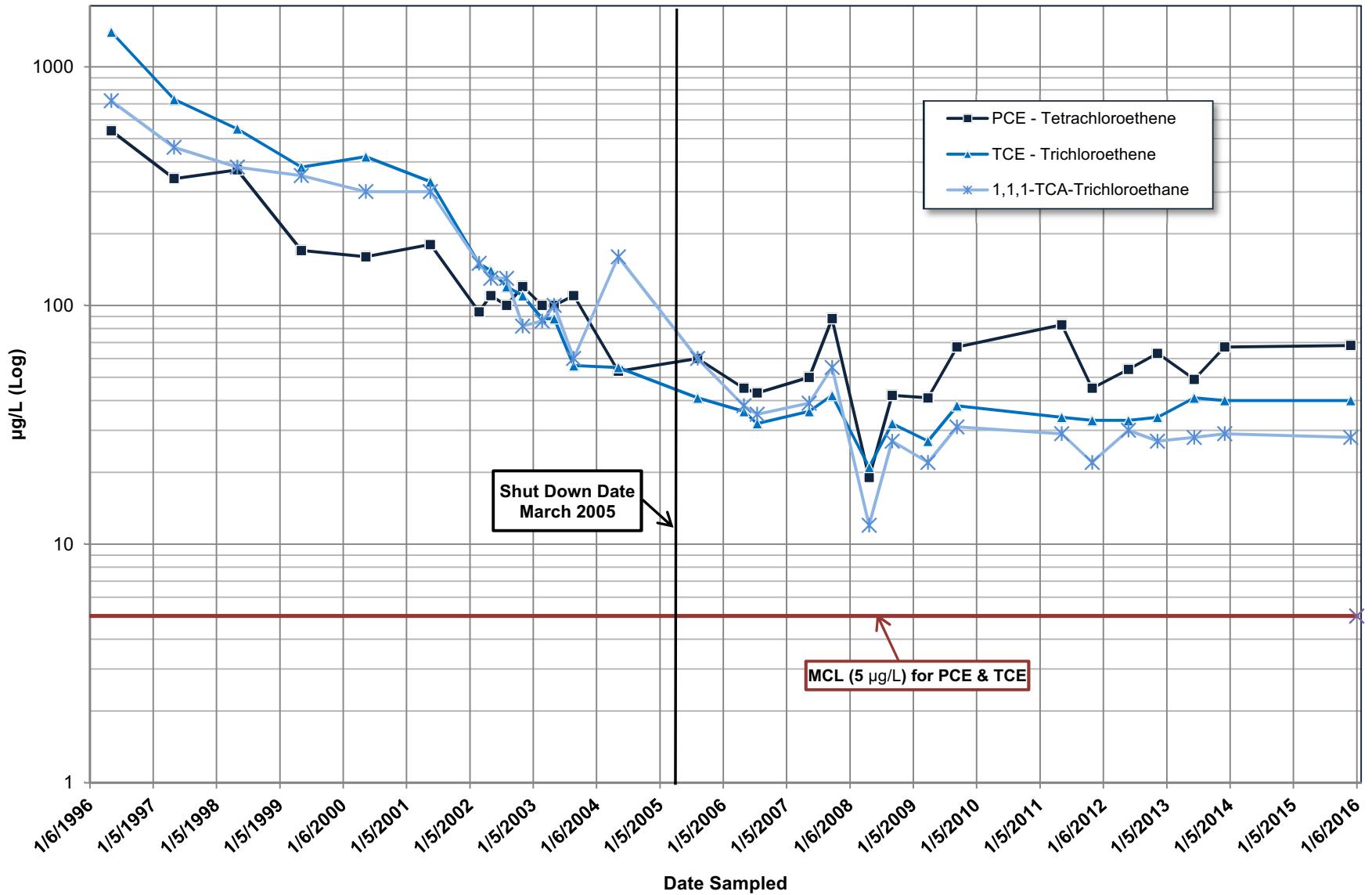
Mike Papp
Project Geologist

Cc: Bill Brewer, PhD, Granville Solvents SRM Group Site Manager
Fred Myers, Ohio EPA, DERR

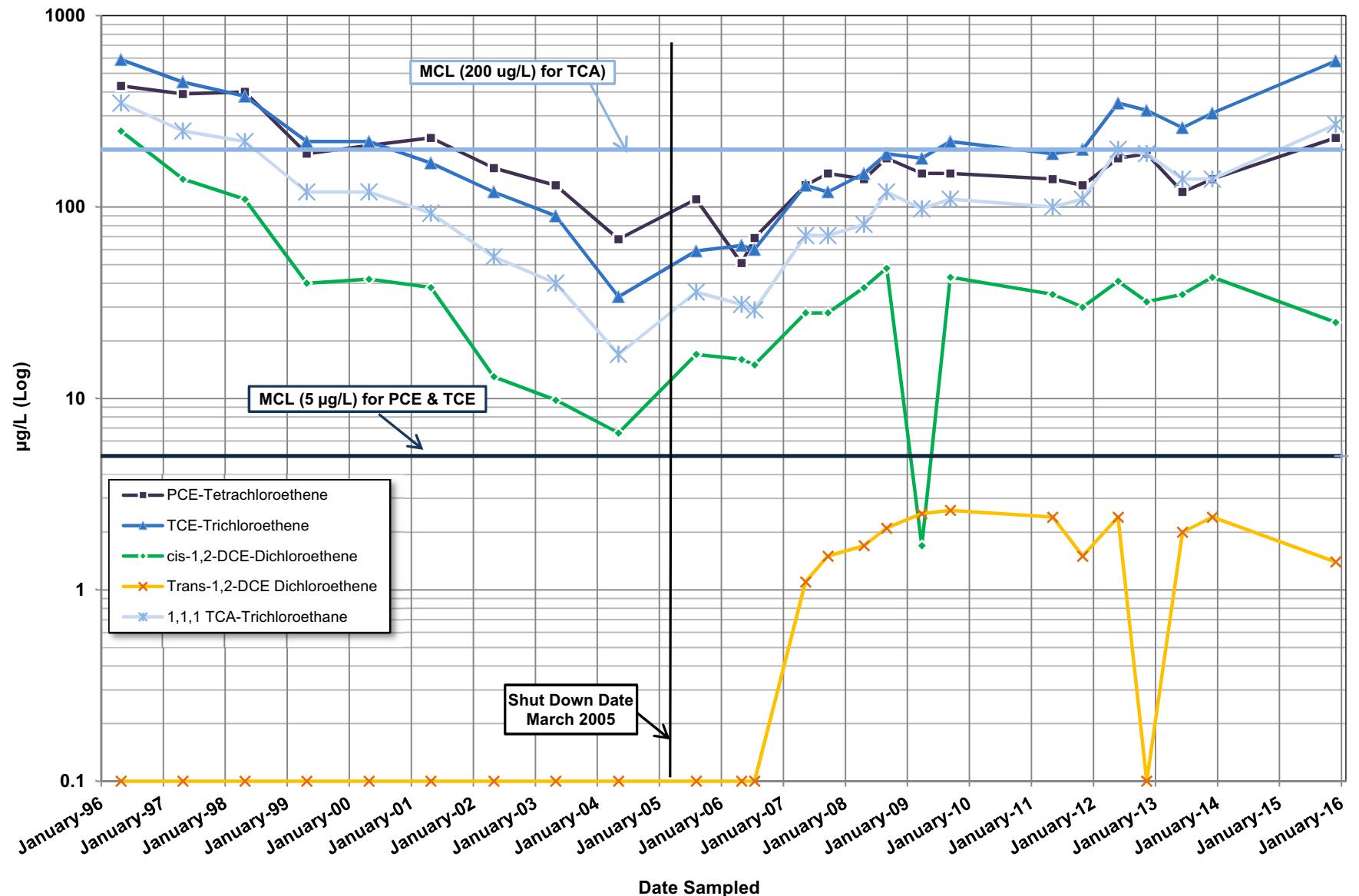
Appendix B

Concentration Trend Graphs

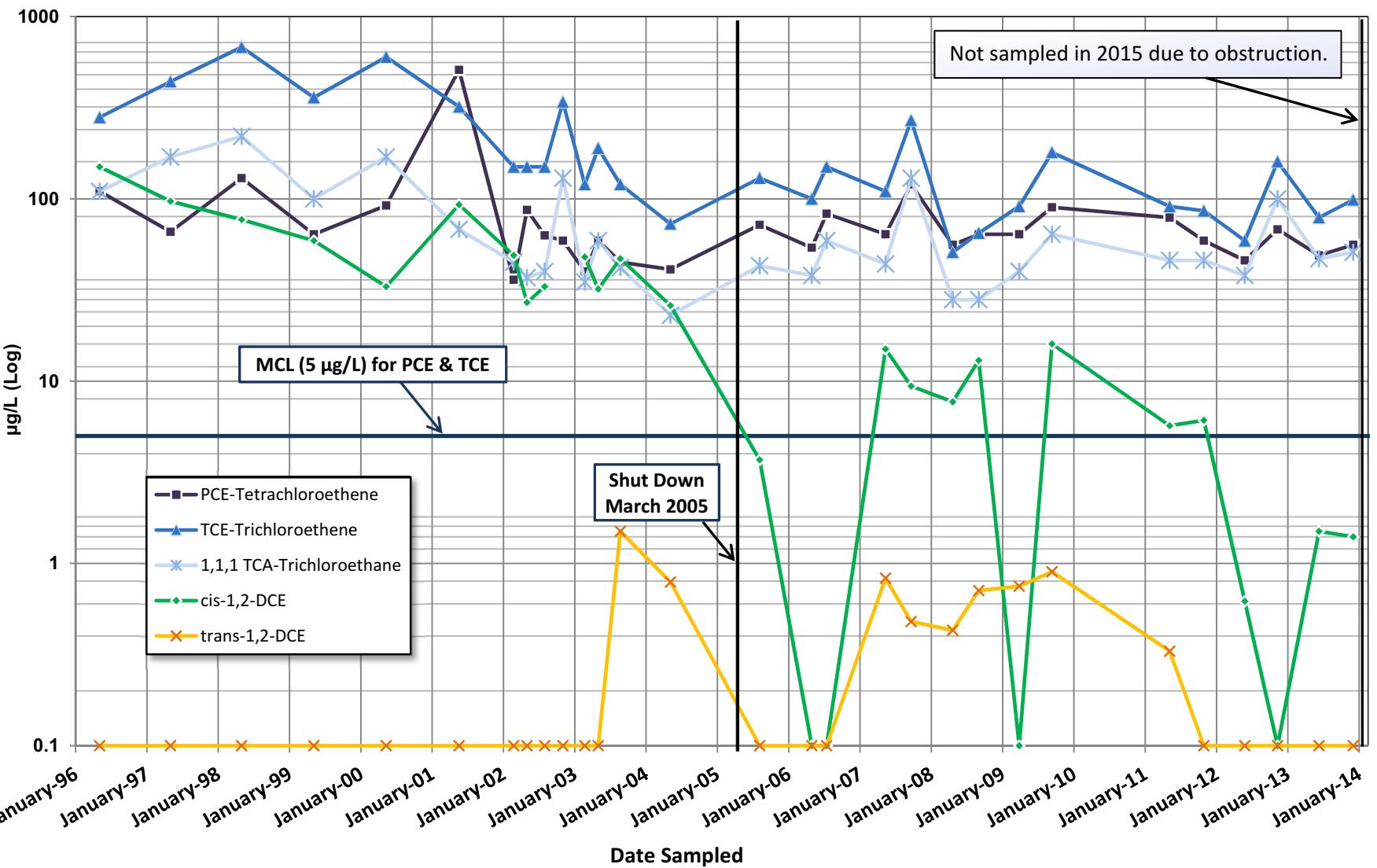
Well MW-P1 Log VOC Concentrations vs. Time - Through December 2015 [Source Area Well]



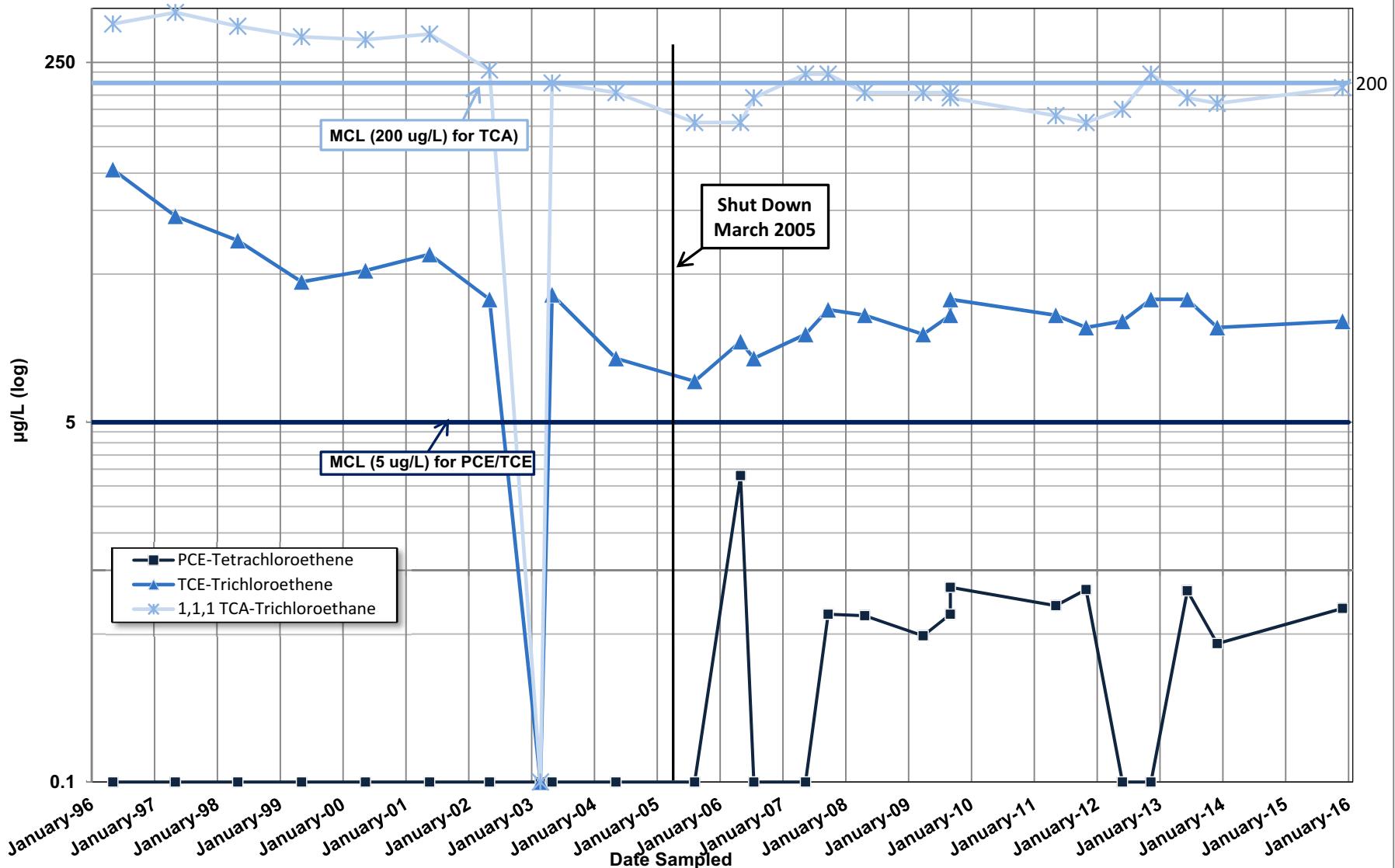
Well MW-02D Log VOC Concentrations vs. Time-Through December 2015 [Source Area Well]



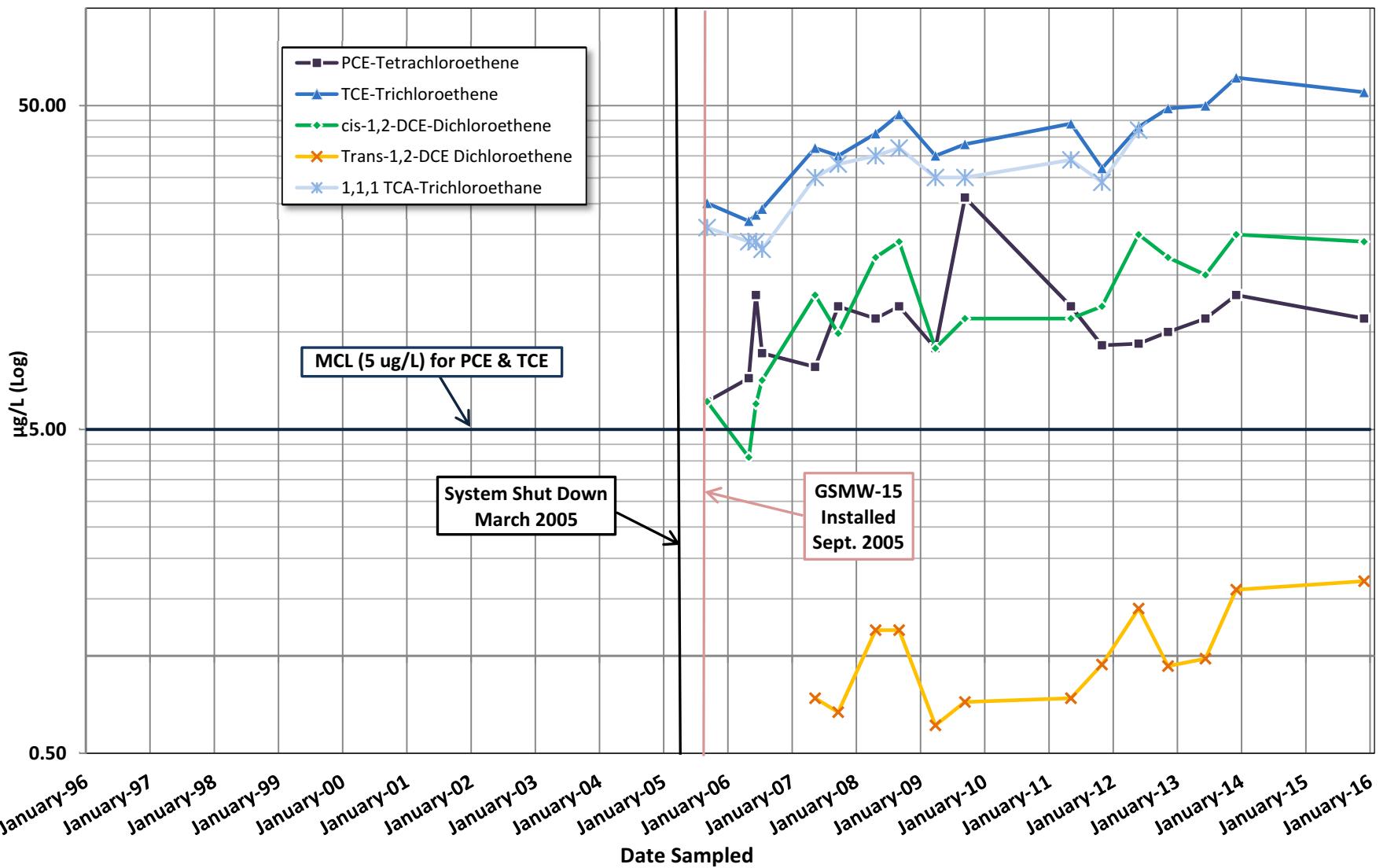
Well MW-04D Log VOC Concentrations vs. Time - Through December 2015 [Source Area Well]



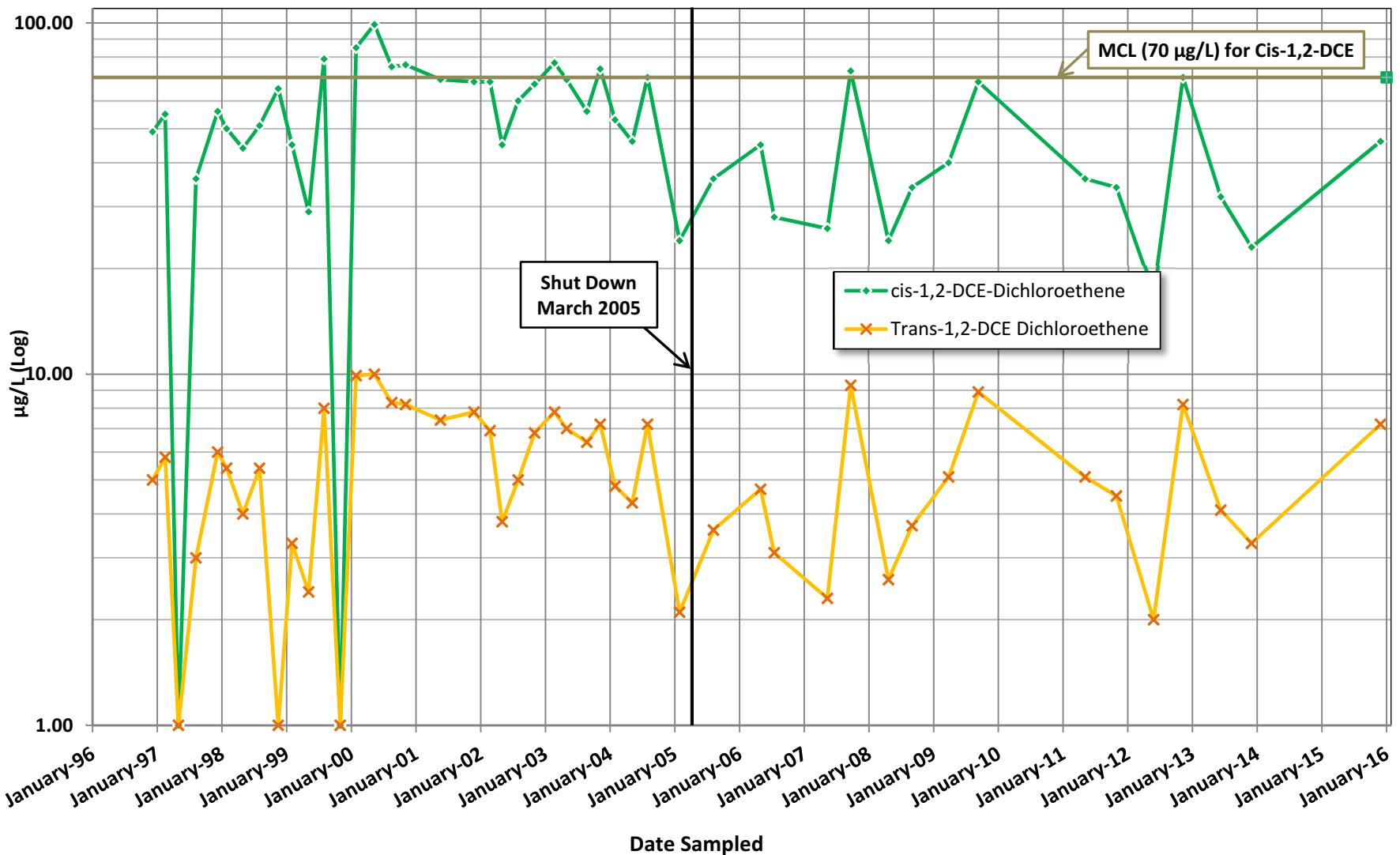
Well MW-06 Log VOC Concentrations vs. Time - Through December 2015 [Source Area Well]



Well GSSMW-15 Log VOC Concentrations vs. Time -Through December 2015
[Intermediate Well]



Well MW-08 Log VOC Concentrations vs. Time - Through December 2015 [Leading Edge Well]



Appendix C

Iso-Concentration Maps- PCE, TCE, TCA

APPENDIX C
PCE ISO-CONCENTRATION MAP
DECEMBER 2015

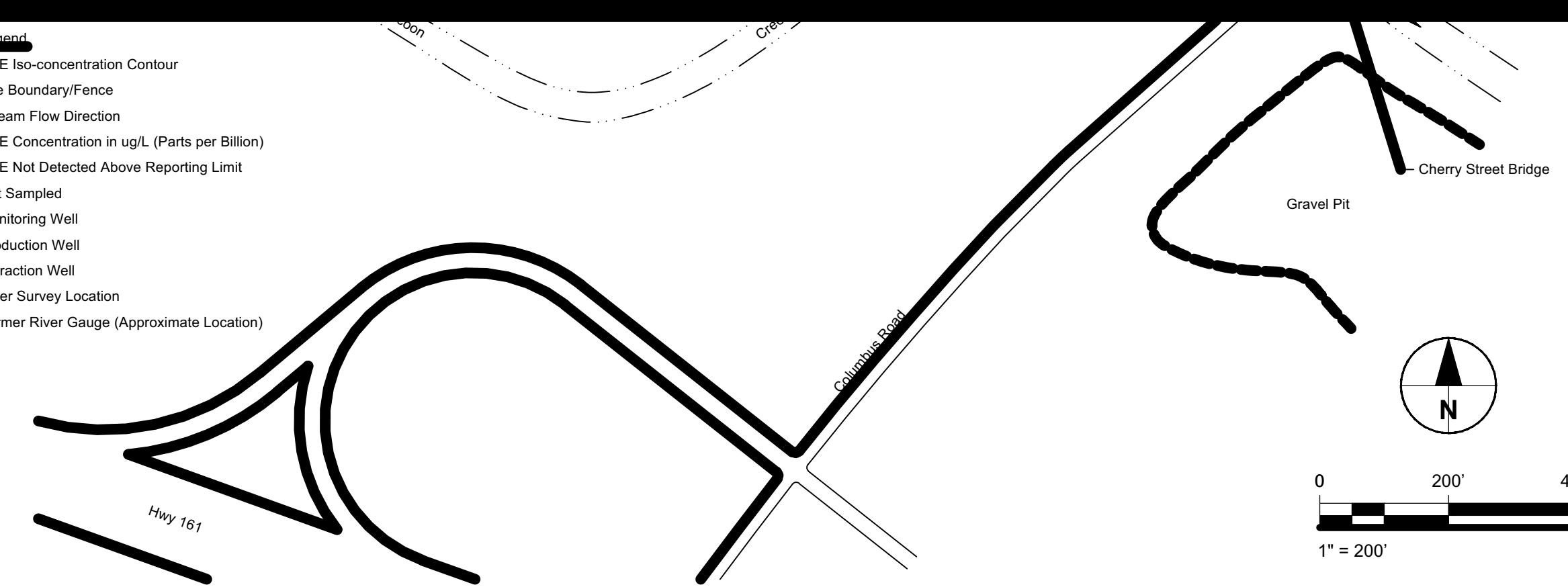
2015 ANNUAL GROUNDWATER MONITORING REPORT
GRANVILLE SOLVENTS SITE
GRANVILLE, OHIO
Project No.: 60478364 Date: 2016-01-04

Project Management Initials: Designer: NLW Checked: MJP Approved: _____

Last saved by: WILZBACHERN(2015-12-30) Last Plotted: 2016-01-04
Filename: L:\WORK\KCAD\60478364\GRANVILLE\900 WORKING\DOCS\CAD01 MODELS\60478364 DEC 2015 PCE ISOCON.DWG

ANSI B 11" x 17"

- Legend**
- PCE Iso-concentration Contour
 - Site Boundary/Fence
 - Stream Flow Direction
 - 230 PCE Concentration in ug/L (Parts per Billion)
 - ND PCE Not Detected Above Reporting Limit
 - NS Not Sampled
 - Monitoring Well
 - Production Well
 - Extraction Well
 - River Survey Location
 - Former River Gauge (Approximate Location)



0 200' 400'
1" = 200'

APPENDIX C
TCE ISO-CONCENTRATION MAP
DECEMBER 2015

2015 ANNUAL GROUNDWATER MONITORING REPORT

GRANVILLE SOLVENTS SITE

GRANVILLE, OHIO

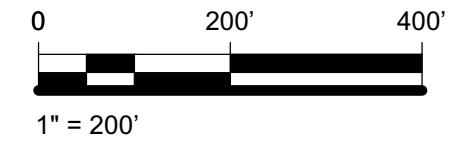
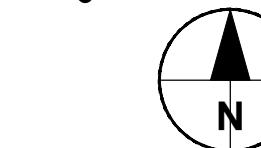
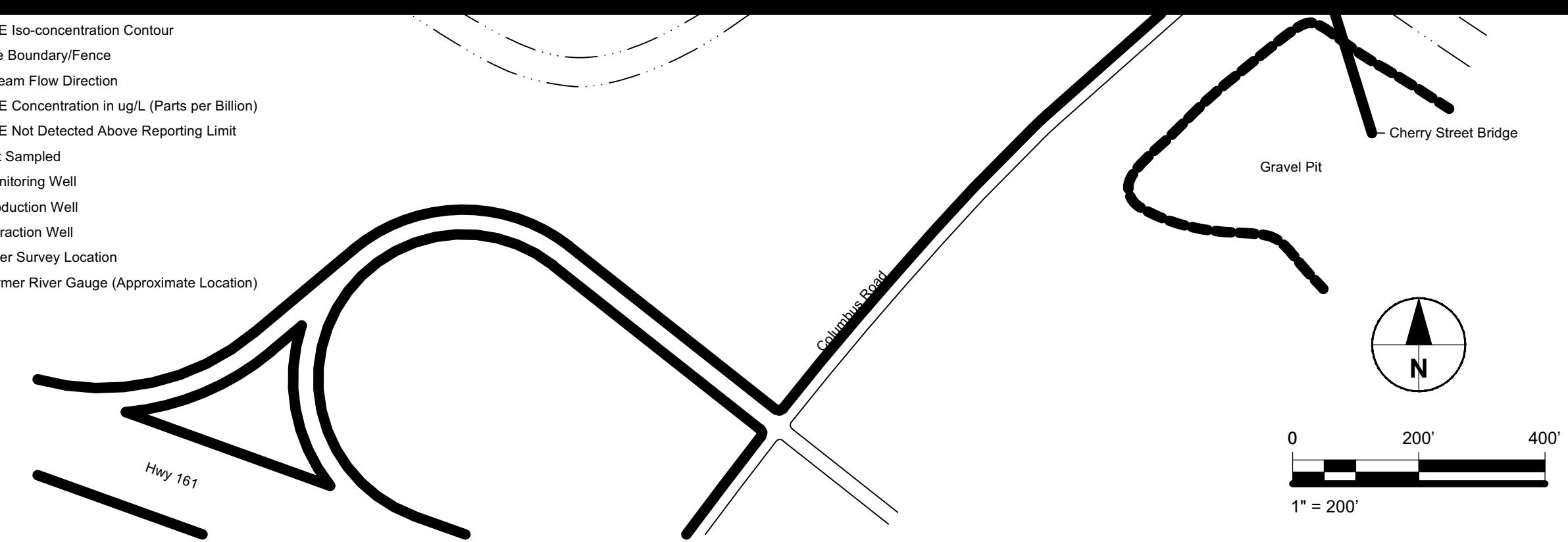
Project No.: 60478364 Date: 2016-01-04

Project Management Initials: Designer: NLW Checked: MJP Approved: _____

Last saved by: WILZBACHERN(2015-12-30) Last Plotted: 2016-01-04
 Filename: L:\WORK\KCAD\60478364\GRANVILLE900\WORKING\DOCS\CAD01\MODELS\60478364.DWG

ANSI B 11" x 17"

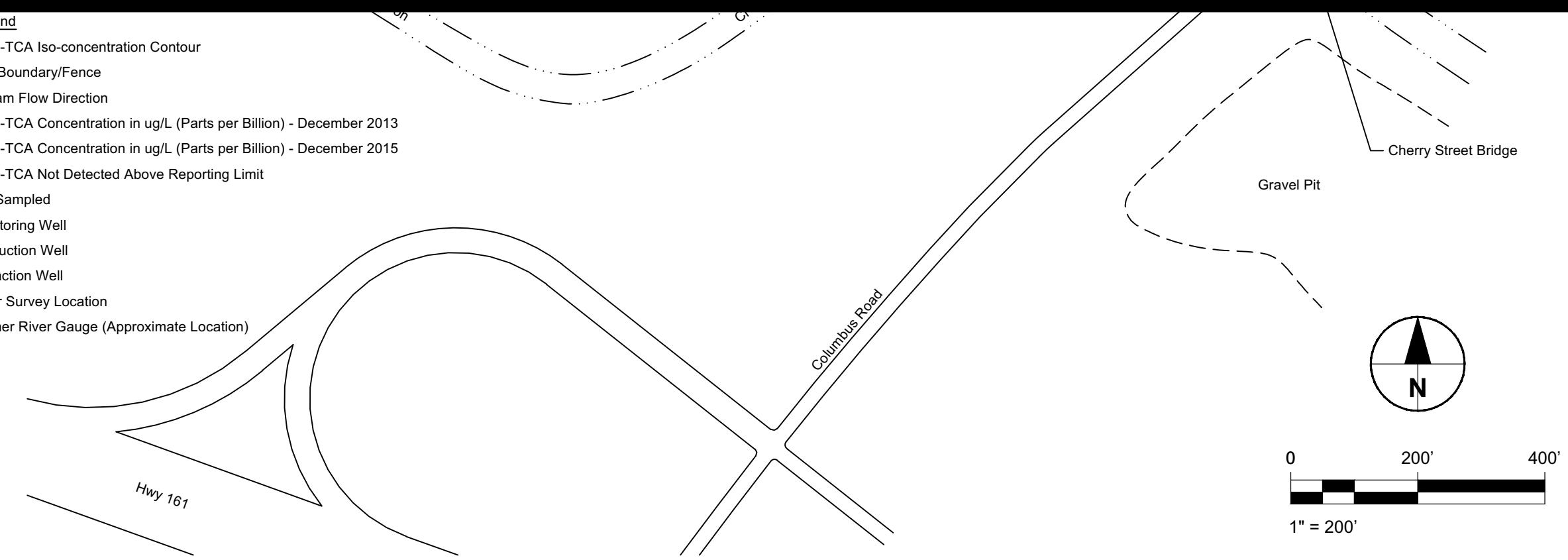
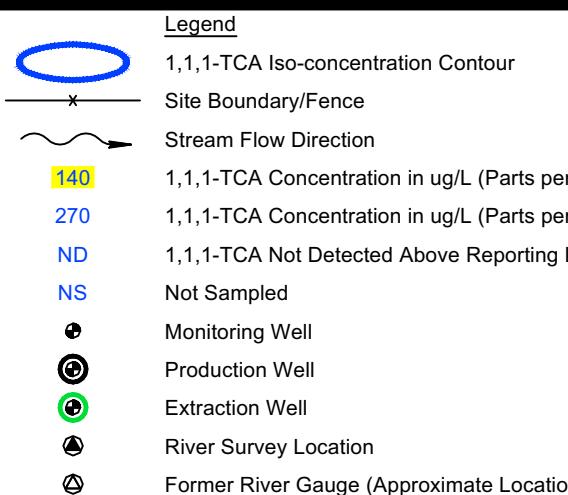
-  TCE Iso-concentration Contour
-  Site Boundary/Fence
-  Stream Flow Direction
-  580 TCE Concentration in ug/L (Parts per Billion)
-  ND TCE Not Detected Above Reporting Limit
-  NS Not Sampled
-  Monitoring Well
-  Production Well
-  Extraction Well
-  River Survey Location
-  Former River Gauge (Approximate Location)



Project Management Initials: Designer: NLW Checked: MJP Approved: _____

ANSI B 11" x 17"

Last saved by: WILZBACHERN(2016-01-25) Last Plotted: 2016-01-25
Filename: L:\WORK\KCAD\60478364\GRANVILLE\900 WORKING\DOCS\CAD01 MODELS\60478364 DEC 2015 111-TCA ISOCON.DWG



0
200'
400'
1" = 200'

Appendix D

Groundwater Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-119700-1

Client Project/Site: Granville Solvents

For:

AECOM, Inc.

4219 Malsbury Road

Cincinnati, Ohio 45242

Attn: Michael Papp

Kathryn Smith

Authorized for release by:

12/15/2015 11:05:45 AM

Kathryn Smith, Project Manager II

(912)354-7858

kathy.smith@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?

Ask
The
Expert

Visit us at:

www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Case Narrative

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Job ID: 680-119700-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: AECOM, Inc.

Project: Granville Solvents

Report Number: 680-119700-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 12/04/2015; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.0 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW02D-120215 (680-119700-1), MW06-120215 (680-119700-2), MW07-120215 (680-119700-3), MW07D-120215 (680-119700-4), MW08-120315 (680-119700-5), MWP1-120215 (680-119700-6), GSSMW08-120215 (680-119700-7), GSSMW09-120215 (680-119700-8), GSSMW15-120315 (680-119700-9), Dupe-120215 (680-119700-10), TB-120215 (680-119700-11) and EB-120315 (680-119700-12) were analyzed for Volatile organic Compounds (GC-MS) in accordance with EPA Method 524.2. The samples were analyzed on 12/13/2015 and 12/14/2015.

Samples MW02D-120215 (680-119700-1)[10X] and MW06-120215 (680-119700-2)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Sample Summary

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-119700-1	MW02D-120215	Water	12/02/15 09:50	12/04/15 09:33
680-119700-2	MW06-120215	Water	12/02/15 11:08	12/04/15 09:33
680-119700-3	MW07-120215	Water	12/02/15 12:22	12/04/15 09:33
680-119700-4	MW07D-120215	Water	12/02/15 13:26	12/04/15 09:33
680-119700-5	MW08-120315	Water	12/03/15 08:52	12/04/15 09:33
680-119700-6	MWP1-120215	Water	12/02/15 08:32	12/04/15 09:33
680-119700-7	GSSMW08-120215	Water	12/02/15 15:05	12/04/15 09:33
680-119700-8	GSSMW09-120215	Water	12/02/15 16:47	12/04/15 09:33
680-119700-9	GSSMW15-120315	Water	12/03/15 10:12	12/04/15 09:33
680-119700-10	Dupe-120215	Water	12/02/15 00:00	12/04/15 09:33
680-119700-11	TB-120215	Water	12/02/15 00:00	12/04/15 09:33
680-119700-12	EB-120315	Water	12/03/15 10:45	12/04/15 09:33

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TestAmerica Savannah

Method Summary

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Method	Method Description	Protocol	Laboratory
524.2	Volatile Organic Compounds (GC/MS)	EPA-DW	TAL SAV

Protocol References:

EPA-DW = "Methods For The Determination Of Organic Compounds In Drinking Water", EPA/600/4-88/039, December 1988 And Its Supplements.

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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Definitions/Glossary

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

☒	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

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Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: MW02D-120215

Date Collected: 12/02/15 09:50
Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-1

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 19:16	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 19:16	1
Bromoform	<0.50		0.50		ug/L			12/13/15 19:16	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 19:16	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 19:16	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 19:16	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 19:16	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 19:16	1
Chloroform	<0.50		0.50		ug/L			12/13/15 19:16	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 19:16	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 19:16	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 19:16	1
cis-1,2-Dichloroethene	25		0.50		ug/L			12/13/15 19:16	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 19:16	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 19:16	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:16	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:16	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:16	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 19:16	1
1,1-Dichloroethane	6.1		0.50		ug/L			12/13/15 19:16	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 19:16	1
1,1-Dichloroethene	1.6		0.50		ug/L			12/13/15 19:16	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 19:16	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 19:16	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 19:16	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 19:16	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 19:16	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 19:16	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 19:16	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 19:16	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 19:16	1
Styrene	<0.50		0.50		ug/L			12/13/15 19:16	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 19:16	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 19:16	1
Toluene	<0.50		0.50		ug/L			12/13/15 19:16	1
trans-1,2-Dichloroethene	1.4		0.50		ug/L			12/13/15 19:16	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 19:16	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:16	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 19:16	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 19:16	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 19:16	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 19:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	87		70 - 130					12/13/15 19:16	1
1,2-Dichlorobenzene-d4	80		70 - 130					12/13/15 19:16	1

Method: 524.2 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	230		5.0		ug/L			12/14/15 13:14	10

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: MW02D-120215

Lab Sample ID: 680-119700-1

Date Collected: 12/02/15 09:50

Matrix: Water

Date Received: 12/04/15 09:33

Method: 524.2 - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	270		5.0		ug/L			12/14/15 13:14	10
Trichloroethene	580		5.0		ug/L			12/14/15 13:14	10
Surrogate									
	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		70 - 130					12/14/15 13:14	10
1,2-Dichlorobenzene-d4	94		70 - 130					12/14/15 13:14	10

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: MW06-120215

Date Collected: 12/02/15 11:08

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-2

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 19:37	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 19:37	1
Bromoform	<0.50		0.50		ug/L			12/13/15 19:37	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 19:37	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 19:37	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 19:37	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 19:37	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 19:37	1
Chloroform	<0.50		0.50		ug/L			12/13/15 19:37	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 19:37	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 19:37	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 19:37	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 19:37	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 19:37	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 19:37	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:37	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:37	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:37	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 19:37	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/13/15 19:37	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 19:37	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 19:37	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 19:37	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 19:37	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 19:37	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 19:37	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 19:37	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 19:37	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 19:37	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 19:37	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 19:37	1
Styrene	<0.50		0.50		ug/L			12/13/15 19:37	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 19:37	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 19:37	1
Tetrachloroethene	0.66		0.50		ug/L			12/13/15 19:37	1
Toluene	<0.50		0.50		ug/L			12/13/15 19:37	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 19:37	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 19:37	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:37	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 19:37	1
Trichloroethene	15		0.50		ug/L			12/13/15 19:37	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 19:37	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 19:37	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 19:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	88		70 - 130					12/13/15 19:37	1
1,2-Dichlorobenzene-d4	83		70 - 130					12/13/15 19:37	1

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: MW06-120215
Date Collected: 12/02/15 11:08
Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-2
Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	190		2.5		ug/L			12/14/15 13:35	5
<hr/>									
Surrogate									
4-Bromofluorobenzene	99		70 - 130				Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene-d4	97		70 - 130					12/14/15 13:35	5
								12/14/15 13:35	5

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TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: MW07-120215

Date Collected: 12/02/15 12:22

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-3

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 19:58	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 19:58	1
Bromoform	<0.50		0.50		ug/L			12/13/15 19:58	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 19:58	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 19:58	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 19:58	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 19:58	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 19:58	1
Chloroform	<0.50		0.50		ug/L			12/13/15 19:58	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 19:58	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 19:58	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 19:58	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 19:58	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 19:58	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 19:58	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:58	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:58	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:58	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 19:58	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/13/15 19:58	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 19:58	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 19:58	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 19:58	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 19:58	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 19:58	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 19:58	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 19:58	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 19:58	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 19:58	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 19:58	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 19:58	1
Styrene	<0.50		0.50		ug/L			12/13/15 19:58	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 19:58	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 19:58	1
Tetrachloroethene	<0.50		0.50		ug/L			12/13/15 19:58	1
Toluene	<0.50		0.50		ug/L			12/13/15 19:58	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 19:58	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 19:58	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 19:58	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			12/13/15 19:58	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 19:58	1
Trichloroethene	<0.50		0.50		ug/L			12/13/15 19:58	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 19:58	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 19:58	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 19:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		70 - 130		12/13/15 19:58	1
1,2-Dichlorobenzene-d4	83		70 - 130		12/13/15 19:58	1

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: MW07D-120215

Date Collected: 12/02/15 13:26

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-4

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 20:19	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 20:19	1
Bromoform	<0.50		0.50		ug/L			12/13/15 20:19	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 20:19	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 20:19	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 20:19	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 20:19	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 20:19	1
Chloroform	<0.50		0.50		ug/L			12/13/15 20:19	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 20:19	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 20:19	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 20:19	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 20:19	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 20:19	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 20:19	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 20:19	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 20:19	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 20:19	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 20:19	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/13/15 20:19	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 20:19	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 20:19	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 20:19	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 20:19	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 20:19	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 20:19	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 20:19	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 20:19	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 20:19	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 20:19	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 20:19	1
Styrene	<0.50		0.50		ug/L			12/13/15 20:19	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 20:19	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 20:19	1
Tetrachloroethene	<0.50		0.50		ug/L			12/13/15 20:19	1
Toluene	<0.50		0.50		ug/L			12/13/15 20:19	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 20:19	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 20:19	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 20:19	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			12/13/15 20:19	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 20:19	1
Trichloroethene	<0.50		0.50		ug/L			12/13/15 20:19	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 20:19	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 20:19	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 20:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		70 - 130			
1,2-Dichlorobenzene-d4	80		70 - 130			

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: MW08-120315

Date Collected: 12/03/15 08:52

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-5

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 20:40	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 20:40	1
Bromoform	<0.50		0.50		ug/L			12/13/15 20:40	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 20:40	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 20:40	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 20:40	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 20:40	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 20:40	1
Chloroform	<0.50		0.50		ug/L			12/13/15 20:40	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 20:40	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 20:40	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 20:40	1
cis-1,2-Dichloroethene	46		0.50		ug/L			12/13/15 20:40	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 20:40	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 20:40	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 20:40	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 20:40	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 20:40	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 20:40	1
1,1-Dichloroethane	3.7		0.50		ug/L			12/13/15 20:40	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 20:40	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 20:40	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 20:40	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 20:40	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 20:40	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 20:40	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 20:40	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 20:40	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 20:40	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 20:40	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 20:40	1
Styrene	<0.50		0.50		ug/L			12/13/15 20:40	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 20:40	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 20:40	1
Tetrachloroethene	<0.50		0.50		ug/L			12/13/15 20:40	1
Toluene	<0.50		0.50		ug/L			12/13/15 20:40	1
trans-1,2-Dichloroethene	7.2		0.50		ug/L			12/13/15 20:40	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 20:40	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 20:40	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			12/13/15 20:40	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 20:40	1
Trichloroethene	<0.50		0.50		ug/L			12/13/15 20:40	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 20:40	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 20:40	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 20:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		70 - 130			
1,2-Dichlorobenzene-d4	83		70 - 130			

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: MWP1-120215

Date Collected: 12/02/15 08:32

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-6

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 21:02	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 21:02	1
Bromoform	<0.50		0.50		ug/L			12/13/15 21:02	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 21:02	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 21:02	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 21:02	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 21:02	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 21:02	1
Chloroform	<0.50		0.50		ug/L			12/13/15 21:02	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 21:02	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 21:02	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 21:02	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 21:02	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 21:02	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 21:02	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:02	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:02	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:02	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 21:02	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/13/15 21:02	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 21:02	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 21:02	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 21:02	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 21:02	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 21:02	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 21:02	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 21:02	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 21:02	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 21:02	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 21:02	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 21:02	1
Styrene	<0.50		0.50		ug/L			12/13/15 21:02	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 21:02	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 21:02	1
Tetrachloroethene	68		0.50		ug/L			12/13/15 21:02	1
Toluene	<0.50		0.50		ug/L			12/13/15 21:02	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 21:02	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 21:02	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:02	1
1,1,1-Trichloroethane	28		0.50		ug/L			12/13/15 21:02	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 21:02	1
Trichloroethene	40		0.50		ug/L			12/13/15 21:02	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 21:02	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 21:02	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 21:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	88		70 - 130			
1,2-Dichlorobenzene-d4	81		70 - 130			

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: GSSMW08-120215

Lab Sample ID: 680-119700-7

Matrix: Water

Date Collected: 12/02/15 15:05

Date Received: 12/04/15 09:33

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 21:23	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 21:23	1
Bromoform	<0.50		0.50		ug/L			12/13/15 21:23	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 21:23	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 21:23	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 21:23	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 21:23	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 21:23	1
Chloroform	<0.50		0.50		ug/L			12/13/15 21:23	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 21:23	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 21:23	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 21:23	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 21:23	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 21:23	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 21:23	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:23	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:23	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:23	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 21:23	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/13/15 21:23	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 21:23	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 21:23	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 21:23	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 21:23	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 21:23	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 21:23	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 21:23	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 21:23	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 21:23	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 21:23	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 21:23	1
Styrene	<0.50		0.50		ug/L			12/13/15 21:23	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 21:23	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 21:23	1
Tetrachloroethene	<0.50		0.50		ug/L			12/13/15 21:23	1
Toluene	<0.50		0.50		ug/L			12/13/15 21:23	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 21:23	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 21:23	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:23	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			12/13/15 21:23	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 21:23	1
Trichloroethene	<0.50		0.50		ug/L			12/13/15 21:23	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 21:23	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 21:23	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 21:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		70 - 130					12/13/15 21:23	1
1,2-Dichlorobenzene-d4	83		70 - 130					12/13/15 21:23	1

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: GSSMW09-120215

Lab Sample ID: 680-119700-8

Matrix: Water

Date Collected: 12/02/15 16:47

Date Received: 12/04/15 09:33

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 21:44	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 21:44	1
Bromoform	<0.50		0.50		ug/L			12/13/15 21:44	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 21:44	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 21:44	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 21:44	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 21:44	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 21:44	1
Chloroform	<0.50		0.50		ug/L			12/13/15 21:44	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 21:44	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 21:44	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 21:44	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 21:44	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 21:44	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 21:44	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:44	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:44	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:44	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 21:44	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/13/15 21:44	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 21:44	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 21:44	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 21:44	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 21:44	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 21:44	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 21:44	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 21:44	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 21:44	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 21:44	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 21:44	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 21:44	1
Styrene	<0.50		0.50		ug/L			12/13/15 21:44	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 21:44	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 21:44	1
Tetrachloroethene	<0.50		0.50		ug/L			12/13/15 21:44	1
Toluene	<0.50		0.50		ug/L			12/13/15 21:44	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 21:44	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 21:44	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 21:44	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			12/13/15 21:44	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 21:44	1
Trichloroethene	<0.50		0.50		ug/L			12/13/15 21:44	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 21:44	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 21:44	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 21:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	88		70 - 130					12/13/15 21:44	1
1,2-Dichlorobenzene-d4	81		70 - 130					12/13/15 21:44	1

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: GSSMW15-120315

Date Collected: 12/03/15 10:12

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-9

Matrix: Water

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 22:05	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 22:05	1
Bromoform	<0.50		0.50		ug/L			12/13/15 22:05	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 22:05	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 22:05	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 22:05	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 22:05	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 22:05	1
Chloroform	<0.50		0.50		ug/L			12/13/15 22:05	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 22:05	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 22:05	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 22:05	1
cis-1,2-Dichloroethene	19		0.50		ug/L			12/13/15 22:05	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 22:05	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 22:05	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 22:05	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 22:05	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 22:05	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 22:05	1
1,1-Dichloroethane	6.1		0.50		ug/L			12/13/15 22:05	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 22:05	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 22:05	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 22:05	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 22:05	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 22:05	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 22:05	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 22:05	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 22:05	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 22:05	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 22:05	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 22:05	1
Styrene	<0.50		0.50		ug/L			12/13/15 22:05	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 22:05	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 22:05	1
Tetrachloroethene	11		0.50		ug/L			12/13/15 22:05	1
Toluene	<0.50		0.50		ug/L			12/13/15 22:05	1
trans-1,2-Dichloroethene	1.7		0.50		ug/L			12/13/15 22:05	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 22:05	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 22:05	1
1,1,1-Trichloroethane	45		0.50		ug/L			12/13/15 22:05	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 22:05	1
Trichloroethene	55		0.50		ug/L			12/13/15 22:05	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 22:05	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 22:05	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 22:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	87		70 - 130			
1,2-Dichlorobenzene-d4	79		70 - 130			

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: Dupe-120215

Lab Sample ID: 680-119700-10

Matrix: Water

Date Collected: 12/02/15 00:00
Date Received: 12/04/15 09:33

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 22:26	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 22:26	1
Bromoform	<0.50		0.50		ug/L			12/13/15 22:26	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 22:26	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 22:26	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 22:26	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 22:26	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 22:26	1
Chloroform	<0.50		0.50		ug/L			12/13/15 22:26	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 22:26	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 22:26	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 22:26	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 22:26	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 22:26	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 22:26	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 22:26	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 22:26	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 22:26	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 22:26	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/13/15 22:26	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 22:26	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 22:26	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 22:26	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 22:26	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 22:26	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 22:26	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 22:26	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 22:26	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 22:26	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 22:26	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 22:26	1
Styrene	<0.50		0.50		ug/L			12/13/15 22:26	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 22:26	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 22:26	1
Tetrachloroethene	<0.50		0.50		ug/L			12/13/15 22:26	1
Toluene	<0.50		0.50		ug/L			12/13/15 22:26	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 22:26	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 22:26	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 22:26	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			12/13/15 22:26	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 22:26	1
Trichloroethene	<0.50		0.50		ug/L			12/13/15 22:26	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 22:26	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 22:26	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 22:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		70 - 130			
1,2-Dichlorobenzene-d4	83		70 - 130			

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: TB-120215

Lab Sample ID: 680-119700-11

Matrix: Water

Date Collected: 12/02/15 00:00

Date Received: 12/04/15 09:33

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 16:51	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 16:51	1
Bromoform	<0.50		0.50		ug/L			12/13/15 16:51	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 16:51	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 16:51	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 16:51	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 16:51	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 16:51	1
Chloroform	<0.50		0.50		ug/L			12/13/15 16:51	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 16:51	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 16:51	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 16:51	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 16:51	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 16:51	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 16:51	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:51	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:51	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:51	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 16:51	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/13/15 16:51	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 16:51	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 16:51	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 16:51	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 16:51	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 16:51	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 16:51	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 16:51	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 16:51	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 16:51	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 16:51	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 16:51	1
Styrene	<0.50		0.50		ug/L			12/13/15 16:51	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 16:51	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 16:51	1
Tetrachloroethene	<0.50		0.50		ug/L			12/13/15 16:51	1
Toluene	<0.50		0.50		ug/L			12/13/15 16:51	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 16:51	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 16:51	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:51	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			12/13/15 16:51	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 16:51	1
Trichloroethene	<0.50		0.50		ug/L			12/13/15 16:51	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 16:51	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 16:51	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		70 - 130			
1,2-Dichlorobenzene-d4	82		70 - 130			

TestAmerica Savannah

Client Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: EB-120315

Lab Sample ID: 680-119700-12

Matrix: Water

Date Collected: 12/03/15 10:45

Date Received: 12/04/15 09:33

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 16:29	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 16:29	1
Bromoform	<0.50		0.50		ug/L			12/13/15 16:29	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 16:29	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 16:29	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 16:29	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 16:29	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 16:29	1
Chloroform	<0.50		0.50		ug/L			12/13/15 16:29	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 16:29	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 16:29	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 16:29	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 16:29	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 16:29	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 16:29	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:29	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:29	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:29	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 16:29	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/13/15 16:29	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 16:29	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 16:29	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 16:29	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 16:29	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 16:29	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 16:29	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 16:29	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 16:29	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 16:29	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 16:29	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 16:29	1
Styrene	<0.50		0.50		ug/L			12/13/15 16:29	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 16:29	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 16:29	1
Tetrachloroethene	<0.50		0.50		ug/L			12/13/15 16:29	1
Toluene	<0.50		0.50		ug/L			12/13/15 16:29	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 16:29	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 16:29	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:29	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			12/13/15 16:29	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 16:29	1
Trichloroethene	<0.50		0.50		ug/L			12/13/15 16:29	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 16:29	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 16:29	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 16:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	86		70 - 130			
1,2-Dichlorobenzene-d4	80		70 - 130			

TestAmerica Savannah

QC Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Method: 524.2 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-414236/8

Matrix: Water

Analysis Batch: 414236

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/13/15 16:08	1
Bromobenzene	<0.50		0.50		ug/L			12/13/15 16:08	1
Bromoform	<0.50		0.50		ug/L			12/13/15 16:08	1
Bromomethane	<1.0		1.0		ug/L			12/13/15 16:08	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/13/15 16:08	1
Chlorobenzene	<0.50		0.50		ug/L			12/13/15 16:08	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/13/15 16:08	1
Chloroethane	<1.0		1.0		ug/L			12/13/15 16:08	1
Chloroform	<0.50		0.50		ug/L			12/13/15 16:08	1
Chloromethane	<0.50		0.50		ug/L			12/13/15 16:08	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 16:08	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/13/15 16:08	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 16:08	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 16:08	1
Dibromomethane	<0.50		0.50		ug/L			12/13/15 16:08	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:08	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:08	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:08	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/13/15 16:08	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/13/15 16:08	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/13/15 16:08	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/13/15 16:08	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 16:08	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/13/15 16:08	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/13/15 16:08	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/13/15 16:08	1
Ethylbenzene	<0.50		0.50		ug/L			12/13/15 16:08	1
Methylene Chloride	<0.50		0.50		ug/L			12/13/15 16:08	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/13/15 16:08	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/13/15 16:08	1
o-Xylene	<0.50		0.50		ug/L			12/13/15 16:08	1
Styrene	<0.50		0.50		ug/L			12/13/15 16:08	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 16:08	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/13/15 16:08	1
Tetrachloroethene	<0.50		0.50		ug/L			12/13/15 16:08	1
Toluene	<0.50		0.50		ug/L			12/13/15 16:08	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/13/15 16:08	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/13/15 16:08	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/13/15 16:08	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			12/13/15 16:08	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/13/15 16:08	1
Trichloroethene	<0.50		0.50		ug/L			12/13/15 16:08	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/13/15 16:08	1
Vinyl chloride	<0.50		0.50		ug/L			12/13/15 16:08	1
Xylenes, Total	<0.50		0.50		ug/L			12/13/15 16:08	1

TestAmerica Savannah

QC Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-414236/8

Matrix: Water

Analysis Batch: 414236

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene			87		70 - 130			1
1,2-Dichlorobenzene-d4			80		70 - 130			1

Lab Sample ID: LCS 680-414236/3

Matrix: Water

Analysis Batch: 414236

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LC S	LC S	Unit	D	% Rec	%Rec.	Limits
		Result	Qualifier					
Benzene	20.0	19.8		ug/L	99	70 - 130		
Bromobenzene	20.0	18.9		ug/L	95	70 - 130		
Bromoform	20.0	19.4		ug/L	97	70 - 130		
Bromomethane	20.0	17.4		ug/L	87	70 - 130		
Carbon tetrachloride	20.0	21.3		ug/L	106	70 - 130		
Chlorobenzene	20.0	20.3		ug/L	101	70 - 130		
Chlorodibromomethane	20.0	20.4		ug/L	102	70 - 130		
Chloroethane	20.0	18.1		ug/L	91	70 - 130		
Chloroform	20.0	19.7		ug/L	99	70 - 130		
Chloromethane	20.0	17.3		ug/L	86	70 - 130		
2-Chlorotoluene	20.0	19.0		ug/L	95	70 - 130		
4-Chlorotoluene	20.0	19.5		ug/L	97	70 - 130		
cis-1,2-Dichloroethene	20.0	20.3		ug/L	102	70 - 130		
cis-1,3-Dichloropropene	20.0	19.6		ug/L	98	70 - 130		
Dibromomethane	20.0	19.7		ug/L	98	70 - 130		
1,2-Dichlorobenzene	20.0	18.9		ug/L	95	70 - 130		
1,3-Dichlorobenzene	20.0	18.8		ug/L	94	70 - 130		
1,4-Dichlorobenzene	20.0	18.8		ug/L	94	70 - 130		
Dichlorobromomethane	20.0	20.0		ug/L	100	70 - 130		
1,1-Dichloroethane	20.0	20.0		ug/L	100	70 - 130		
1,2-Dichloroethane	20.0	20.2		ug/L	101	70 - 130		
1,1-Dichloroethene	20.0	21.6		ug/L	108	70 - 130		
1,2-Dichloropropane	20.0	19.0		ug/L	95	70 - 130		
1,3-Dichloropropane	20.0	19.9		ug/L	100	70 - 130		
2,2-Dichloropropane	20.0	21.9		ug/L	109	70 - 130		
1,1-Dichloropropene	20.0	20.8		ug/L	104	70 - 130		
Ethylbenzene	20.0	19.9		ug/L	99	70 - 130		
Methylene Chloride	20.0	22.9		ug/L	115	70 - 130		
Methyl tert-butyl ether	20.0	19.7		ug/L	98	70 - 130		
m-Xylene & p-Xylene	20.0	19.8		ug/L	99	70 - 130		
o-Xylene	20.0	19.7		ug/L	99	70 - 130		
Styrene	20.0	19.8		ug/L	99	70 - 130		
1,1,1,2-Tetrachloroethane	20.0	19.7		ug/L	99	70 - 130		
1,1,2,2-Tetrachloroethane	20.0	18.7		ug/L	94	70 - 130		
Tetrachloroethene	20.0	19.3		ug/L	97	70 - 130		
Toluene	20.0	19.4		ug/L	97	70 - 130		
trans-1,2-Dichloroethene	20.0	19.8		ug/L	99	70 - 130		
trans-1,3-Dichloropropene	20.0	21.0		ug/L	105	70 - 130		
1,2,4-Trichlorobenzene	20.0	18.2		ug/L	91	70 - 130		
1,1,1-Trichloroethane	20.0	20.6		ug/L	103	70 - 130		

TestAmerica Savannah

QC Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-414236/3

Matrix: Water

Analysis Batch: 414236

**Client Sample ID: Lab Control Sample
Prep Type: Total/NA**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
1,1,2-Trichloroethane	20.0	19.3		ug/L		97	70 - 130
Trichloroethene	20.0	19.4		ug/L		97	70 - 130
1,2,3-Trichloropropane	20.0	18.7		ug/L		94	70 - 130
Vinyl chloride	20.0	21.1		ug/L		106	70 - 130
Xylenes, Total	40.0	39.6		ug/L		99	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	93		70 - 130
1,2-Dichlorobenzene-d4	91		70 - 130

Lab Sample ID: LCSD 680-414236/4

Matrix: Water

Analysis Batch: 414236

**Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA**

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result	Qualifier						
Benzene	20.0	19.1		ug/L		96	70 - 130	4	30
Bromobenzene	20.0	18.0		ug/L		90	70 - 130	5	30
Bromoform	20.0	17.7		ug/L		88	70 - 130	9	30
Bromomethane	20.0	18.0		ug/L		90	70 - 130	4	30
Carbon tetrachloride	20.0	20.7		ug/L		103	70 - 130	3	30
Chlorobenzene	20.0	19.1		ug/L		95	70 - 130	6	30
Chlorodibromomethane	20.0	19.1		ug/L		95	70 - 130	7	30
Chloroethane	20.0	16.1		ug/L		81	70 - 130	12	30
Chloroform	20.0	19.0		ug/L		95	70 - 130	4	30
Chloromethane	20.0	17.2		ug/L		86	70 - 130	0	30
2-Chlorotoluene	20.0	18.4		ug/L		92	70 - 130	3	30
4-Chlorotoluene	20.0	18.4		ug/L		92	70 - 130	5	30
cis-1,2-Dichloroethene	20.0	19.4		ug/L		97	70 - 130	5	30
cis-1,3-Dichloropropene	20.0	18.4		ug/L		92	70 - 130	6	30
Dibromomethane	20.0	18.2		ug/L		91	70 - 130	8	30
1,2-Dichlorobenzene	20.0	17.7		ug/L		88	70 - 130	7	30
1,3-Dichlorobenzene	20.0	18.1		ug/L		91	70 - 130	4	30
1,4-Dichlorobenzene	20.0	17.5		ug/L		87	70 - 130	7	30
Dichlorobromomethane	20.0	18.8		ug/L		94	70 - 130	6	30
1,1-Dichloroethane	20.0	19.9		ug/L		99	70 - 130	1	30
1,2-Dichloroethane	20.0	18.6		ug/L		93	70 - 130	8	30
1,1-Dichloroethene	20.0	20.7		ug/L		104	70 - 130	4	30
1,2-Dichloropropane	20.0	18.1		ug/L		90	70 - 130	5	30
1,3-Dichloropropane	20.0	18.6		ug/L		93	70 - 130	7	30
2,2-Dichloropropane	20.0	21.6		ug/L		108	70 - 130	1	30
1,1-Dichloropropene	20.0	20.5		ug/L		102	70 - 130	2	30
Ethylbenzene	20.0	19.1		ug/L		96	70 - 130	4	30
Methylene Chloride	20.0	21.6		ug/L		108	70 - 130	6	30
Methyl tert-butyl ether	20.0	18.3		ug/L		92	70 - 130	7	30
m-Xylene & p-Xylene	20.0	18.9		ug/L		95	70 - 130	5	30
o-Xylene	20.0	19.2		ug/L		96	70 - 130	3	30
Styrene	20.0	18.6		ug/L		93	70 - 130	6	30
1,1,1,2-Tetrachloroethane	20.0	19.0		ug/L		95	70 - 130	4	30

TestAmerica Savannah

QC Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-414236/4

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Matrix: Water

Analysis Batch: 414236

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2,2-Tetrachloroethane	20.0	17.4		ug/L		87	70 - 130	7	30
Tetrachloroethene	20.0	19.5		ug/L		98	70 - 130	1	30
Toluene	20.0	19.2		ug/L		96	70 - 130	1	30
trans-1,2-Dichloroethene	20.0	19.4		ug/L		97	70 - 130	2	30
trans-1,3-Dichloropropene	20.0	19.4		ug/L		97	70 - 130	8	30
1,2,4-Trichlorobenzene	20.0	17.4		ug/L		87	70 - 130	5	30
1,1,1-Trichloroethane	20.0	20.1		ug/L		100	70 - 130	3	30
1,1,2-Trichloroethane	20.0	17.9		ug/L		90	70 - 130	8	30
Trichloroethene	20.0	19.0		ug/L		95	70 - 130	3	30
1,2,3-Trichloropropane	20.0	18.0		ug/L		90	70 - 130	4	30
Vinyl chloride	20.0	21.8		ug/L		109	70 - 130	3	30
Xylenes, Total	40.0	38.1		ug/L		95	70 - 130	4	30

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	94		70 - 130
1,2-Dichlorobenzene-d4	87		70 - 130

Lab Sample ID: MB 680-414269/8

Client Sample ID: Method Blank
Prep Type: Total/NA

Matrix: Water

Analysis Batch: 414269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.50		0.50		ug/L			12/14/15 12:15	1
Bromobenzene	<0.50		0.50		ug/L			12/14/15 12:15	1
Bromoform	<0.50		0.50		ug/L			12/14/15 12:15	1
Bromomethane	<1.0		1.0		ug/L			12/14/15 12:15	1
Carbon tetrachloride	<0.50		0.50		ug/L			12/14/15 12:15	1
Chlorobenzene	<0.50		0.50		ug/L			12/14/15 12:15	1
Chlorodibromomethane	<0.50		0.50		ug/L			12/14/15 12:15	1
Chloroethane	<1.0		1.0		ug/L			12/14/15 12:15	1
Chloroform	<0.50		0.50		ug/L			12/14/15 12:15	1
Chloromethane	<0.50		0.50		ug/L			12/14/15 12:15	1
2-Chlorotoluene	<0.50		0.50		ug/L			12/14/15 12:15	1
4-Chlorotoluene	<0.50		0.50		ug/L			12/14/15 12:15	1
cis-1,2-Dichloroethene	<0.50		0.50		ug/L			12/14/15 12:15	1
cis-1,3-Dichloropropene	<0.50		0.50		ug/L			12/14/15 12:15	1
Dibromomethane	<0.50		0.50		ug/L			12/14/15 12:15	1
1,2-Dichlorobenzene	<0.50		0.50		ug/L			12/14/15 12:15	1
1,3-Dichlorobenzene	<0.50		0.50		ug/L			12/14/15 12:15	1
1,4-Dichlorobenzene	<0.50		0.50		ug/L			12/14/15 12:15	1
Dichlorobromomethane	<0.50		0.50		ug/L			12/14/15 12:15	1
1,1-Dichloroethane	<0.50		0.50		ug/L			12/14/15 12:15	1
1,2-Dichloroethane	<0.50		0.50		ug/L			12/14/15 12:15	1
1,1-Dichloroethene	<0.50		0.50		ug/L			12/14/15 12:15	1
1,2-Dichloropropane	<0.50		0.50		ug/L			12/14/15 12:15	1
1,3-Dichloropropane	<0.50		0.50		ug/L			12/14/15 12:15	1
2,2-Dichloropropane	<0.50		0.50		ug/L			12/14/15 12:15	1
1,1-Dichloropropene	<0.50		0.50		ug/L			12/14/15 12:15	1

TestAmerica Savannah

QC Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-414269/8

Matrix: Water

Analysis Batch: 414269

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.50		0.50		ug/L			12/14/15 12:15	1
Methylene Chloride	<0.50		0.50		ug/L			12/14/15 12:15	1
Methyl tert-butyl ether	<0.50		0.50		ug/L			12/14/15 12:15	1
m-Xylene & p-Xylene	<0.50		0.50		ug/L			12/14/15 12:15	1
o-Xylene	<0.50		0.50		ug/L			12/14/15 12:15	1
Styrene	<0.50		0.50		ug/L			12/14/15 12:15	1
1,1,1,2-Tetrachloroethane	<0.50		0.50		ug/L			12/14/15 12:15	1
1,1,2,2-Tetrachloroethane	<0.50		0.50		ug/L			12/14/15 12:15	1
Tetrachloroethene	<0.50		0.50		ug/L			12/14/15 12:15	1
Toluene	<0.50		0.50		ug/L			12/14/15 12:15	1
trans-1,2-Dichloroethene	<0.50		0.50		ug/L			12/14/15 12:15	1
trans-1,3-Dichloropropene	<0.50		0.50		ug/L			12/14/15 12:15	1
1,2,4-Trichlorobenzene	<0.50		0.50		ug/L			12/14/15 12:15	1
1,1,1-Trichloroethane	<0.50		0.50		ug/L			12/14/15 12:15	1
1,1,2-Trichloroethane	<0.50		0.50		ug/L			12/14/15 12:15	1
Trichloroethene	<0.50		0.50		ug/L			12/14/15 12:15	1
1,2,3-Trichloropropane	<0.50		0.50		ug/L			12/14/15 12:15	1
Vinyl chloride	<0.50		0.50		ug/L			12/14/15 12:15	1
Xylenes, Total	<0.50		0.50		ug/L			12/14/15 12:15	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		70 - 130			1
1,2-Dichlorobenzene-d4	85		70 - 130			1

Lab Sample ID: LCS 680-414269/3

Matrix: Water

Analysis Batch: 414269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Benzene	20.0	19.9		ug/L		100	70 - 130	
Bromobenzene	20.0	18.8		ug/L		94	70 - 130	
Bromoform	20.0	17.6		ug/L		88	70 - 130	
Bromomethane	20.0	16.0		ug/L		80	70 - 130	
Carbon tetrachloride	20.0	20.5		ug/L		102	70 - 130	
Chlorobenzene	20.0	20.0		ug/L		100	70 - 130	
Chlorodibromomethane	20.0	19.3		ug/L		96	70 - 130	
Chloroethane	20.0	17.6		ug/L		88	70 - 130	
Chloroform	20.0	19.3		ug/L		97	70 - 130	
Chloromethane	20.0	17.6		ug/L		88	70 - 130	
2-Chlorotoluene	20.0	19.2		ug/L		96	70 - 130	
4-Chlorotoluene	20.0	19.1		ug/L		96	70 - 130	
cis-1,2-Dichloroethene	20.0	19.5		ug/L		98	70 - 130	
cis-1,3-Dichloropropene	20.0	18.5		ug/L		92	70 - 130	
Dibromomethane	20.0	19.2		ug/L		96	70 - 130	
1,2-Dichlorobenzene	20.0	18.9		ug/L		94	70 - 130	
1,3-Dichlorobenzene	20.0	18.8		ug/L		94	70 - 130	
1,4-Dichlorobenzene	20.0	18.4		ug/L		92	70 - 130	
Dichlorobromomethane	20.0	19.2		ug/L		96	70 - 130	

TestAmerica Savannah

QC Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 680-414269/3

Matrix: Water

Analysis Batch: 414269

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
1,1-Dichloroethane	20.0	19.9		ug/L		100	70 - 130	
1,2-Dichloroethane	20.0	19.3		ug/L		96	70 - 130	
1,1-Dichloroethene	20.0	21.1		ug/L		105	70 - 130	
1,2-Dichloropropane	20.0	18.5		ug/L		92	70 - 130	
1,3-Dichloropropane	20.0	19.4		ug/L		97	70 - 130	
2,2-Dichloropropane	20.0	21.0		ug/L		105	70 - 130	
1,1-Dichloropropene	20.0	20.6		ug/L		103	70 - 130	
Ethylbenzene	20.0	19.8		ug/L		99	70 - 130	
Methylene Chloride	20.0	21.8		ug/L		109	70 - 130	
Methyl tert-butyl ether	20.0	18.7		ug/L		94	70 - 130	
m-Xylene & p-Xylene	20.0	19.7		ug/L		99	70 - 130	
o-Xylene	20.0	19.8		ug/L		99	70 - 130	
Styrene	20.0	19.2		ug/L		96	70 - 130	
1,1,1,2-Tetrachloroethane	20.0	19.4		ug/L		97	70 - 130	
1,1,2,2-Tetrachloroethane	20.0	18.0		ug/L		90	70 - 130	
Tetrachloroethene	20.0	19.6		ug/L		98	70 - 130	
Toluene	20.0	19.4		ug/L		97	70 - 130	
trans-1,2-Dichloroethene	20.0	20.1		ug/L		101	70 - 130	
trans-1,3-Dichloropropene	20.0	19.2		ug/L		96	70 - 130	
1,2,4-Trichlorobenzene	20.0	18.6		ug/L		93	70 - 130	
1,1,1-Trichloroethane	20.0	20.3		ug/L		102	70 - 130	
1,1,2-Trichloroethane	20.0	18.8		ug/L		94	70 - 130	
Trichloroethene	20.0	19.5		ug/L		98	70 - 130	
1,2,3-Trichloropropane	20.0	18.3		ug/L		91	70 - 130	
Vinyl chloride	20.0	21.2		ug/L		106	70 - 130	
Xylenes, Total	40.0	39.5		ug/L		99	70 - 130	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	96		70 - 130
1,2-Dichlorobenzene-d4	92		70 - 130

Lab Sample ID: LCSD 680-414269/4

Matrix: Water

Analysis Batch: 414269

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
Benzene	20.0	19.7		ug/L		98	70 - 130	1	30	
Bromobenzene	20.0	19.0		ug/L		95	70 - 130	1	30	
Bromoform	20.0	18.1		ug/L		90	70 - 130	3	30	
Bromomethane	20.0	18.4		ug/L		92	70 - 130	14	30	
Carbon tetrachloride	20.0	20.2		ug/L		101	70 - 130	1	30	
Chlorobenzene	20.0	20.1		ug/L		101	70 - 130	1	30	
Chlorodibromomethane	20.0	19.8		ug/L		99	70 - 130	3	30	
Chloroethane	20.0	17.8		ug/L		89	70 - 130	1	30	
Chloroform	20.0	19.5		ug/L		98	70 - 130	1	30	
Chloromethane	20.0	16.1		ug/L		80	70 - 130	9	30	
2-Chlorotoluene	20.0	19.1		ug/L		96	70 - 130	1	30	
4-Chlorotoluene	20.0	19.0		ug/L		95	70 - 130	1	30	

TestAmerica Savannah

QC Sample Results

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Method: 524.2 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-414269/4

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Matrix: Water

Analysis Batch: 414269

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	20.0	20.1		ug/L		100	70 - 130	3	30
cis-1,3-Dichloropropene	20.0	18.9		ug/L		94	70 - 130	2	30
Dibromomethane	20.0	19.8		ug/L		99	70 - 130	3	30
1,2-Dichlorobenzene	20.0	19.2		ug/L		96	70 - 130	2	30
1,3-Dichlorobenzene	20.0	19.2		ug/L		96	70 - 130	2	30
1,4-Dichlorobenzene	20.0	18.8		ug/L		94	70 - 130	2	30
Dichlorobromomethane	20.0	19.8		ug/L		99	70 - 130	3	30
1,1-Dichloroethane	20.0	20.2		ug/L		101	70 - 130	1	30
1,2-Dichloroethane	20.0	20.1		ug/L		100	70 - 130	4	30
1,1-Dichloroethene	20.0	19.7		ug/L		99	70 - 130	7	30
1,2-Dichloropropane	20.0	18.4		ug/L		92	70 - 130	0	30
1,3-Dichloropropane	20.0	20.2		ug/L		101	70 - 130	4	30
2,2-Dichloropropane	20.0	21.0		ug/L		105	70 - 130	0	30
1,1-Dichloropropene	20.0	20.5		ug/L		102	70 - 130	1	30
Ethylbenzene	20.0	19.9		ug/L		100	70 - 130	0	30
Methylene Chloride	20.0	22.5		ug/L		113	70 - 130	3	30
Methyl tert-butyl ether	20.0	19.7		ug/L		98	70 - 130	5	30
m-Xylene & p-Xylene	20.0	19.4		ug/L		97	70 - 130	1	30
o-Xylene	20.0	19.9		ug/L		99	70 - 130	0	30
Styrene	20.0	19.4		ug/L		97	70 - 130	1	30
1,1,1,2-Tetrachloroethane	20.0	19.6		ug/L		98	70 - 130	1	30
1,1,2,2-Tetrachloroethane	20.0	18.8		ug/L		94	70 - 130	4	30
Tetrachloroethene	20.0	19.5		ug/L		97	70 - 130	0	30
Toluene	20.0	19.5		ug/L		97	70 - 130	0	30
trans-1,2-Dichloroethene	20.0	19.5		ug/L		98	70 - 130	3	30
trans-1,3-Dichloropropene	20.0	20.1		ug/L		100	70 - 130	5	30
1,2,4-Trichlorobenzene	20.0	19.0		ug/L		95	70 - 130	2	30
1,1,1-Trichloroethane	20.0	20.6		ug/L		103	70 - 130	1	30
1,1,2-Trichloroethane	20.0	19.7		ug/L		98	70 - 130	5	30
Trichloroethene	20.0	19.7		ug/L		98	70 - 130	1	30
1,2,3-Trichloropropane	20.0	19.0		ug/L		95	70 - 130	4	30
Vinyl chloride	20.0	20.7		ug/L		104	70 - 130	2	30
Xylenes, Total	40.0	39.3		ug/L		98	70 - 130	1	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	95		70 - 130
1,2-Dichlorobenzene-d4	95		70 - 130

TestAmerica Savannah

QC Association Summary

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

GC/MS VOA

Analysis Batch: 414236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-119700-1	MW02D-120215	Total/NA	Water	524.2	
680-119700-2	MW06-120215	Total/NA	Water	524.2	
680-119700-3	MW07-120215	Total/NA	Water	524.2	
680-119700-4	MW07D-120215	Total/NA	Water	524.2	
680-119700-5	MW08-120315	Total/NA	Water	524.2	
680-119700-6	MWP1-120215	Total/NA	Water	524.2	
680-119700-7	GSSMW08-120215	Total/NA	Water	524.2	
680-119700-8	GSSMW09-120215	Total/NA	Water	524.2	
680-119700-9	GSSMW15-120315	Total/NA	Water	524.2	
680-119700-10	Dupe-120215	Total/NA	Water	524.2	
680-119700-11	TB-120215	Total/NA	Water	524.2	
680-119700-12	EB-120315	Total/NA	Water	524.2	
LCS 680-414236/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 680-414236/4	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 680-414236/8	Method Blank	Total/NA	Water	524.2	

Analysis Batch: 414269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-119700-1 - DL	MW02D-120215	Total/NA	Water	524.2	
680-119700-2 - DL	MW06-120215	Total/NA	Water	524.2	
LCS 680-414269/3	Lab Control Sample	Total/NA	Water	524.2	
LCSD 680-414269/4	Lab Control Sample Dup	Total/NA	Water	524.2	
MB 680-414269/8	Method Blank	Total/NA	Water	524.2	

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Lab Chronicle

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: MW02D-120215

Date Collected: 12/02/15 09:50

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 19:16	RWB	TAL SAV
Total/NA	Analysis	524.2	DL	10	414269	12/14/15 13:14	RWB	TAL SAV

Client Sample ID: MW06-120215

Date Collected: 12/02/15 11:08

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 19:37	RWB	TAL SAV
Total/NA	Analysis	524.2	DL	5	414269	12/14/15 13:35	RWB	TAL SAV

Client Sample ID: MW07-120215

Date Collected: 12/02/15 12:22

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 19:58	RWB	TAL SAV

Client Sample ID: MW07D-120215

Date Collected: 12/02/15 13:26

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 20:19	RWB	TAL SAV

Client Sample ID: MW08-120315

Date Collected: 12/03/15 08:52

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 20:40	RWB	TAL SAV

Client Sample ID: MWP1-120215

Date Collected: 12/02/15 08:32

Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 21:02	RWB	TAL SAV

TestAmerica Savannah

Lab Chronicle

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Client Sample ID: GSSMW08-120215

Date Collected: 12/02/15 15:05
Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 21:23	RWB	TAL SAV

Client Sample ID: GSSMW09-120215

Date Collected: 12/02/15 16:47
Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 21:44	RWB	TAL SAV

Client Sample ID: GSSMW15-120315

Date Collected: 12/03/15 10:12
Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 22:05	RWB	TAL SAV

Client Sample ID: Dupe-120215

Date Collected: 12/02/15 00:00
Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 22:26	RWB	TAL SAV

Client Sample ID: TB-120215

Date Collected: 12/02/15 00:00
Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 16:51	RWB	TAL SAV

Client Sample ID: EB-120315

Date Collected: 12/03/15 10:45
Date Received: 12/04/15 09:33

Lab Sample ID: 680-119700-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	524.2		1	414236	12/13/15 16:29	RWB	TAL SAV

Laboratory References:

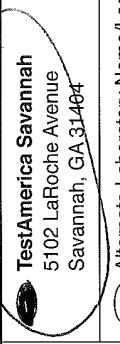
TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD



Website: www.testamericainc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Serial Number 101488

THE LEADER IN ENVIRONMENTAL TESTING

PROJECT REFERENCE <i>Granville Salvage Site</i>	PROJECT NO. PO. NUMBER <i>69482</i>	PROJECT LOCATION (STATE) <i>OH</i>	MATRIX TYPE CONTRACT NO.	REQUIRED ANALYSIS			PAGE <i>1</i>	OF <i>1</i>
TAL (LAB) PROJECT MANAGER <i>Kathy Smith</i>	CLIENT PHONE <i>513-419-3483</i>	CLIENT FAX					STANDARD REPORT DELIVERY DATE DUE <i> </i>	
CLIENT (SITE) RM <i>Ron Boelker</i>	CLIENT E-MAIL <i>Ron.Boelker@arcion.com</i>						EXPEDITED REPORT DELIVERY (SURCHARGE) DATE DUE <i> </i>	
CLIENT NAME <i>A2C.com</i>							NUMBER OF COOLERS SUBMITTED PER SHIPMENT: <i> </i>	
CLIENT ADDRESS <i>525 1/2 St., Cincinnati, OH 45202</i>							REMARKS <i> </i>	
COMPANY CONTRACTING THIS WORK (if applicable)								

SAMPLE	SAMPLE IDENTIFICATION		NUMBER OF CONTAINERS SUBMITTED			REMARKS		
DATE	TIME							
12/2/15 0950		<i>MW02D-120215</i>	X					
11/08		<i>MW06-120215</i>	X					
12/22		<i>MW07-120215</i>	X					
13/26		<i>MW07D-120215</i>	X					
12/3/15 0852		<i>MW08-120315</i>	X					
12/3/15 0832		<i>MW P1-120215</i>	X					
15/05		<i>GSSM W08-120215</i>	X					
16/47		<i>GSSM W09-120215</i>	X					
12/3/15 1012		<i>GSSM W15-120315</i>	X					
12/3/15 -		<i>Dope-120215</i>	X					
-		<i>TB-120215</i>	X					
12/3/15 1045		<i>EB-120315</i>	X					
RELINQUISHED BY: (SIGNATURE) <i>John J. Clegg</i>	DATE <i>12/3/15</i>	TIME <i>1235</i>	RELINQUISHED BY: (SIGNATURE) <i>Cinne Riviera</i>	DATE <i>12-3-15</i>	TIME <i>1235</i>	RELINQUISHED BY: (SIGNATURE) <i>Cinne Riviera</i>	DATE <i>12-3-15</i>	TIME <i>1700</i>
RECEIVED BY: (SIGNATURE) <i>Cinne Riviera</i>	DATE <i>12/01/15</i>	TIME <i>1235</i>	RECEIVED BY: (SIGNATURE) <i>Custody Seal No. 0933</i>	DATE <i>12/3/15</i>	TIME <i>1235</i>	RECEIVED BY: (SIGNATURE) <i>Custody Seal No. 0933</i>	DATE <i>12-3-15</i>	TIME <i>1700</i>
LABORATORY USE ONLY								
RECEIVED FOR LABORATORY BY: <i>White (ES 12/07/15)</i>	DATE <i>12/01/15</i>	TIME <i>0933</i>	CUSTODY INTACT YES <input checked="" type="radio"/> NO <input type="radio"/>	CUSTODY SEAL NO. <i> </i>	SAVANNAH LOG NO. <i>119700</i>	LABORATORY REMARKS <i>4.6 c / 5.0 c/c</i>	DATE <i>12/01/15</i>	TIME <i>0933</i>

TAL8240-680 (1008)

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Login Sample Receipt Checklist

Client: AECOM, Inc.

Job Number: 680-119700-1

Login Number: 119700**List Source: TestAmerica Savannah****List Number: 1****Creator: White, Menica R**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: AECOM, Inc.
Project/Site: Granville Solvents

TestAmerica Job ID: 680-119700-1

Laboratory: TestAmerica Savannah

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
	AFCEE		SAVLAB	
A2LA	DoD ELAP		399.01	02-28-17
A2LA	ISO/IEC 17025		399.01	02-28-17
Alabama	State Program	4	41450	06-30-16
Arkansas DEQ	State Program	6	88-0692	01-31-16 *
California	State Program	9	2939	07-31-16
Colorado	State Program	8	N/A	12-31-15 *
Connecticut	State Program	1	PH-0161	03-31-17
Florida	NELAP	4	E87052	06-30-16
GA Dept. of Agriculture	State Program	4	N/A	06-12-17
Georgia	State Program	4	803	06-30-16
Guam	State Program	9	14-004r	04-16-16
Hawaii	State Program	9	N/A	06-30-16
Illinois	NELAP	5	200022	11-30-15 *
Indiana	State Program	5	N/A	06-30-16
Iowa	State Program	7	353	06-30-17
Kentucky (DW)	State Program	4	90084	12-31-15 *
Kentucky (UST)	State Program	4	18	06-30-16
Kentucky (WW)	State Program	4	90084	12-31-15 *
Louisiana	NELAP	6	30690	06-30-16
Louisiana (DW)	NELAP	6	LA150014	12-31-15 *
Maine	State Program	1	GA00006	09-24-16
Maryland	State Program	3	250	12-31-15 *
Massachusetts	State Program	1	M-GA006	06-30-16
Michigan	State Program	5	9925	03-05-16
Mississippi	State Program	4	N/A	06-30-15 *
Montana	State Program	8	CERT0081	12-31-15
Nebraska	State Program	7	TestAmerica-Savannah	06-30-16
New Jersey	NELAP	2	GA769	06-30-16
New Mexico	State Program	6	N/A	06-30-16
New York	NELAP	2	10842	03-31-16
North Carolina (DW)	State Program	4	13701	07-31-16
North Carolina (WW/SW)	State Program	4	269	12-31-15 *
Oklahoma	State Program	6	9984	08-31-16
Pennsylvania	NELAP	3	68-00474	06-30-16
Puerto Rico	State Program	2	GA00006	12-31-15 *
South Carolina	State Program	4	98001	06-30-16
Tennessee	State Program	4	TN02961	06-30-16
Texas	NELAP	6	T104704185-14-7	11-30-16
USDA	Federal		SAV 3-04	06-11-17
Virginia	NELAP	3	460161	06-14-16
Washington	State Program	10	C805	06-10-16
West Virginia (DW)	State Program	3	9950C	12-31-15 *
West Virginia DEP	State Program	3	094	06-30-16
Wisconsin	State Program	5	999819810	08-31-16
Wyoming	State Program	8	8TMS-L	06-30-16

* Certification renewal pending - certification considered valid.

TestAmerica Savannah